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NATIONAL EDUCATIONAL ASSOCIATION

David S. Snedden
12-22-1902

JOURNAL

OF

PROCEEDINGS AND ADDRESSES

OF THE

FORTY-FIRST ANNUAL MEETING

HELD AT

MINNEAPOLIS, MINNESOTA

JULY 7-11, 1902

1902
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CONSTITUTION

OF THE

NATIONAL EDUCATIONAL ASSOCIATION

PREAMBLE

To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States, we, whose names are subjoined, agree to adopt the following

CONSTITUTION

ARTICLE I — NAME

This association shall be styled the NATIONAL EDUCATIONAL ASSOCIATION.

ARTICLE II — DEPARTMENTS

SECTION 1. It shall consist of eighteen departments: first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training; sixth, of Art Education; seventh, of Kindergarten Education; eighth, of Music Education; ninth, of Secondary Education; tenth, of Business Education; eleventh, of Child Study; twelfth, of Physical Education; thirteenth, of Natural Science Instruction; fourteenth, of School Administration; fifteenth, the Library Department; sixteenth, of Special Education; seventeenth, of Indian Education; and eighteenth, the National Council of Education.

SEC. 2. Other departments may be organized in the manner prescribed in this constitution.

ARTICLE III — MEMBERSHIP

SECTION 1. There shall be three classes of members, namely, active, associate, and corresponding.

SEC. 2. Teachers and all who are actively associated with the management of educational institutions, including libraries and periodicals, may become active members. All others who pay an annual membership fee of two dollars may become associate members.

Eminent educators not residing in America may be elected by the Directory to be corresponding members. The number of corresponding members shall at no time exceed fifty.

SEC. 3. Any person eligible may become an active member upon application indorsed by two active members, and the payment of an enrollment fee of two dollars and the annual dues for the current year.

Active members only have the right to vote and to hold office in the general Association or in the several departments.

All active members must pay annual dues of two dollars, and will be entitled to the volume of *Proceedings* without "coupon" or other conditions. The annual membership fee shall be payable at the time of the annual convention, or by remittance to the Secretary before September 1 of each year. Any active member may discontinue membership by giving written notice to the Secretary before September 1, and may restore the same only on payment of the enrollment fee of two dollars and the annual dues for the current year.

All life members and life directors shall be denominated active members, and shall enjoy all the powers and privileges of such members without the payment of annual dues.

Associate members may receive the volume of *Proceedings* in accordance with the usual "coupon" conditions, as printed on the membership certificate.

Corresponding members will be entitled to the volume of *Proceedings* without the payment of fees or other conditions.

SEC. 4. The names of active and corresponding members only will be printed in the volume of *Proceedings*, with their respective educational titles, offices, and addresses, the list to be revised annually by the Secretary of the Association.

ARTICLE IV—OFFICERS

SECTION 1. The officers of this Association shall consist of a President, twelve Vice-Presidents, a Secretary, a Treasurer, a Board of Directors, a Board of Trustees, and an Executive Committee, as hereinafter provided.

SEC. 2. The Board of Directors shall consist of the President of the National Educational Association, First Vice-President, Secretary, Treasurer, chairman of the Board of Trustees, and one additional member from each state, territory, or district, to be elected by the Association for the term of one year, or until their successors are chosen, and of all life directors elected previous to July 10, 1895.

All past presidents of the Association now living (July 10, 1895), and all future presidents at the close of their respective terms of office, and the United States Commissioner of Education, shall be life directors of the Association.

The President of the National Educational Association, First Vice-President, Treasurer, chairman of the Board of Trustees, and a member of the Association to be chosen annually by the Board of Directors, which member shall hold office for one year, shall constitute the Executive Committee.

SEC. 3. The elective officers of the Association, with the exception of the Secretary, shall be chosen by the active members of the Association by ballot, unless otherwise ordered, on the third day of each annual session, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual session subsequent to their election, and until their successors are chosen, except as hereinafter provided.

SEC. 4. Each department shall be administered by a president, vice-president, secretary, and such other officers as it shall deem necessary to conduct its affairs; but no person *shall be elected to any office of the Association, or of any department, who is not, at the time of the election, an active member of the Association.*

SEC. 5. The President shall preside at all meetings of the Association and of the Board of Directors, and shall perform the duties usually devolving upon a presiding officer. In his absence, the first vice-president in order, who is present, shall preside; and in the absence of all vice-presidents, a *pro-tempore* chairman shall be appointed on nomination, the Secretary putting the question.

SEC. 6. The Secretary shall keep a full and accurate report of the proceedings of the general meetings of the Association and all meetings of the Board of Directors, and shall conduct such correspondence as the directors may assign, and shall have his records present at all meetings of the Association and of the Board of Directors. The Secretary of each department shall, in addition to performing the duties usually pertaining to his office, keep a list of the members of his department.

SEC. 7. The Treasurer shall receive, and under the direction of the Board of Trustees hold in safe-keeping, all moneys paid to the Association; shall expend the same only upon the order of said board; shall keep an exact account of his receipts and expenditures, with vouchers for the latter, which accounts, ending the 1st day of July each year, he shall render to the Board of Trustees and, when approved by said board, he shall report the same to the Board of Directors. The Treasurer shall give such bond for the faithful discharge of his duties as may be required by the Board of Trustees; and he shall continue in office until the first meeting of the Board of Directors held prior to the annual meeting of the Association next succeeding that for which he is elected.

SEC. 8. The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the Association, excepting those herein intrusted to the Board of Trustees; shall make all necessary arrangements for its meetings, and shall do all in its power to make it a useful and honorable institution. Upon the written application of twenty active members of the Association for permission to establish a new department, it may grant such permission. Such new department shall in all respects be entitled to the same rights and privileges as the others. The formation of such department shall in effect be a sufficient amendment to this constitution for the insertion of its name in Art. II, and the Secretary shall make the necessary alterations.

SEC. 9. The Board of Trustees shall consist of four members, elected by the Board of Directors for the term of four years, and the President of the Association, who shall be a member *ex officio* during his term of office. At the election of the trustees in 1886, one trustee shall be elected for one year, one for two years, one for three years, and one for four years; and annually thereafter, at the first meeting of the Board of Directors held prior to the annual meeting of the Association, one trustee shall be elected for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term; and the absence of a trustee from two successive annual meetings of the board shall forfeit his membership therein. The Board of Trustees thus elected shall constitute the body corporate of the Association, as provided in the certificate of incorporation under the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, dated the 24th day of February, 1886, at Washington, D. C., and recorded in Liber No. 4, "Acts of Incorporation for the District of Columbia."

SEC. 10. It shall be the duty of the Board of Trustees to provide for safe-keeping and investment of all funds which the Association may receive from donations; and the income of such invested funds shall be used exclusively in paying the cost of publishing the annual volume of *Proceedings* of the Association, excepting when donors shall specify otherwise. It shall also be the duty of the board to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors, or by the President and Secretary of the Association acting under the authority of the Board of Directors; and, when practicable, the trustees shall invest all surplus funds exceeding one hundred dollars that shall remain in the hands of the Treasurer after paying the expenses of the Association for the previous year.

SEC. 11. The Board of Trustees shall elect the Secretary of the Association, who shall also be secretary of the Executive Committee, and shall fix the compensation and the term of office for a period not to exceed four years.

ARTICLE V—MEETINGS

SECTION 1. The annual meeting of the Association shall be held at such time and place as shall be determined by the Board of Directors.

SEC. 2. Special meetings may be called by the President at the request of five directors.

SEC. 3. Any department of the Association may hold a special meeting at such time and place as by its own regulations it shall appoint.

SEC. 4. The Board of Directors shall hold its regular meetings at the place and not less than two hours before the assembling of the Association.

SEC. 5. Special meetings may be held at such other times and places as the board or the President shall determine.

SEC. 6. Each new board shall organize at the session of its election. At its first meeting a committee on publication shall be appointed, which shall consist of the President and the Secretary of the Association for the previous year, and one member from each department.

ARTICLE VI—BY-LAWS

By-laws not inconsistent with this constitution may be adopted by a two-thirds vote of the Association.

ARTICLE VII—AMENDMENTS

This constitution may be altered or amended at a regular meeting by the unanimous vote of the members present; or by a two-thirds vote of the members present, provided that the alteration or amendment has been substantially proposed in writing at a previous meeting.

BY-LAWS

1. At the first session of each annual meeting of the Association there shall be appointed by the President a committee on resolutions; and at the third session of such meeting here shall be appointed a committee on nominations, consisting of one member from each state and territory represented, the same to be appointed by the President on the nomination of a majority of the active members in attendance from such state or territory; provided, however, that such appointment shall be made by the President without such nomination, when less than three active members from a state or territory are in attendance, and also when a majority of the active members in attendance from any state or territory shall fail to make a nomination.

The meetings of active members to nominate members of the nominating committee shall be held at 5:30 P. M. on the first day of the annual meeting of the Association, at such place as shall be announced in the general program.

2. The President and Secretary shall certify to the Board of Trustees all bills approved by the Board of Directors.

3. Each paying member of the Association shall be entitled to a copy of its *Proceedings*.

4. No paper, lecture, or address shall be read before the Association or any of its departments in the absence of its author, nor shall any such paper, lecture, or address be published in the volume of *Proceedings*, without the consent of the Association, upon approval of the Executive Committee.

5. It shall be the duty of the President, Secretary, and Treasurer of the Association to appoint annually some competent person to examine the securities of the Permanent Fund held by the Board of Trustees, and his certificate, showing the condition of the said fund, shall be attached to the report of the Board of Trustees.

ACT OF INCORPORATION

At a meeting of the Board of Directors of the National Educational Association, held at Saratoga Springs, N. Y., July 14, 1885, the following resolution was passed:

Resolved, That a committee of three be appointed to secure articles of incorporation for the National Educational Association, under United States or state laws, as speedily as may be.

N. A. Calkins, of New York; Thomas W. Bicknell, of Massachusetts; and Eli T. Tappan, of Ohio, were appointed such committee.

Under the authority of the resolution quoted above, and with the approval of the committee, and by competent legal advice, the chairman obtained a

CERTIFICATE OF INCORPORATION

We, the undersigned, Norman A. Calkins, John Eaton, and Zalmon Richards, citizens of the United States, and two of them citizens of the District of Columbia, do hereby associate ourselves together, pursuant to the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, under the name of the "National Educational Association," for the full period of twenty years, the purpose and objects of which are to elevate the character and advance the interests of the profession of teaching and to promote the cause of popular education in the United States. . . . . To secure the full benefit of said act we do here execute this our certificate of incorporation as said act provides.

In witness whereof, we severally set our hands and seals this 24th day of February, 1886, at Washington, D. C.

Norman A. Calkins. [L. S.]
John Eaton. [L. S.]
Zalmon Richards. [L. S.]

Duly acknowledged before Michael P. Callan, Notary Public in and for the District of Columbia, and recorded in Liber No. 4, Acts of Incorporation for the District of Columbia.

CALENDAR OF MEETINGS

NATIONAL TEACHERS' ASSOCIATION

1857.—PHILADELPHIA, PA. (Organized.)
James L. Enos, Chairman.
W. E. Sheldon, Secretary.

1858.—CINCINNATI, O.
Z. Richards, President.
J. W. Bulkley, Secretary.
A. J. Rickoff, Treasurer.

1859.—WASHINGTON, D. C.
A. J. Rickoff, President.
J. W. Bulkley, Secretary.
C. S. Pennell, Treasurer.

1860.—BUFFALO, N. Y.
J. W. Bulkley, President.
Z. Richards, Secretary.
O. C. Wight, Treasurer.

1861, 1862.—No session.

1863.—CHICAGO, ILL.
John D. Philbrick, President.
James Cruikshank, Secretary.
O. C. Wight, Treasurer.

1864.—OGDENSBURG, N. Y.
W. H. Wells, President.
David N. Camp, Secretary.
Z. Richards, Treasurer.

1865.—HARRISBURG, PA.
S. S. Greene, President.
W. E. Sheldon, Secretary.
Z. Richards, Treasurer.

1866.—INDIANAPOLIS, IND.
J. P. Wickersham, President.
S. H. White, Secretary.
S. P. Bates, Treasurer.

1867.—No session.

1868.—NASHVILLE, TENN.
J. M. Gregory, President.
L. Van Bokkelen, Secretary.
James Cruikshank, Treasurer.

1869.—TRENTON, N. J.
L. Van Bokkelen, President.
W. E. Crosby, Secretary.
A. L. Barber, Treasurer.

1870.—CLEVELAND, O.
Daniel B. Hagar, President.
A. P. Marble, Secretary.
W. E. Crosby, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATIONAL ASSOCIATION

1871.—ST. LOUIS, MO.
J. L. Pickard, President.
W. E. Crosby, Secretary.
John Hancock, Treasurer.

1872.—BOSTON, MASS.
E. E. White, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1873.—ELMIRA, N. Y.
B. G. Northrop, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1874.—DETROIT, MICH.
S. H. White, President.
A. P. Marble, Secretary.
John Hancock, Treasurer.

1875.—MINNEAPOLIS, MINN.
W. T. Harris, President.
M. R. Abbott, Secretary.
A. P. Marble, Treasurer.

1876.—BALTIMORE, MD.
W. F. Phelps, President.
W. D. Henkle, Secretary.
A. P. Marble, Treasurer.

1877.—LOUISVILLE, KY.
M. A. Newell, President.
W. D. Henkle, Secretary.
J. Ormond Wilson, Treasurer.

1878.—No session.

1879.—PHILADELPHIA, PA.
John Hancock, President.
W. D. Henkle, Secretary.
J. Ormond Wilson, Treasurer.

1880.—CHAUTAUQUA, N. Y.
J. Ormond Wilson, President.
W. D. Henkle, Secretary.
E. T. Tappan, Treasurer.

1881.—ATLANTA, GA.
James H. Smart, President.
W. D. Henkle, Secretary.
E. T. Tappan, Treasurer.

1882.—SARATOGA SPRINGS, N. Y.
G. J. Orr, President.
W. E. Sheldon, Secretary.
H. S. Tarbell, Treasurer.

1883.—SARATOGA SPRINGS, N. Y.
E. T. Tappan, President.
W. E. Sheldon, Secretary.
N. A. Calkins, Treasurer.

1884.—MADISON, WIS.
Thomas W. Bicknell, President.
H. S. Tarbell, Secretary.
N. A. Calkins, Treasurer.

1885.—SARATOGA SPRINGS, N. Y.
F. Louis Soldan, President.
W. E. Sheldon, Secretary.
N. A. Calkins, Treasurer.

1886.—TOPEKA, KAN.
N. A. Calkins, President.
W. E. Sheldon, Secretary.
E. C. Hewett, Treasurer.

1887.—CHICAGO, ILL.
W. E. Sheldon, President.
J. H. Canfield, Secretary.
E. C. Hewett, Treasurer.

1888.—SAN FRANCISCO, CAL.
Aaron Gove, President.
J. H. Canfield, Secretary.
E. C. Hewett, Treasurer.

1889.—NASHVILLE, TENN.
Albert P. Marble, President.
J. H. Canfield, Secretary.
E. C. Hewett, Treasurer.

1890.—ST. PAUL, MINN.
J. H. Canfield, President.
W. R. Garrett, Secretary.
E. C. Hewett, Treasurer.

1891.—TORONTO, ONTARIO.
W. R. Garrett, President.
E. H. Cook, Secretary.
J. M. Greenwood, Treasurer.

1892.—SARATOGA SPRINGS, N. Y.
E. H. Cook, President.
R. W. Stevenson, Secretary.
J. M. Greenwood, Treasurer.

1893.—CHICAGO, ILL.
(International Congress of Education.)
Albert G. Lane, President.
Irwin Shepard, Secretary.
J. M. Greenwood, Treasurer.

1894.—ASBURY PARK, N. J.
Albert G. Lane, President.
Irwin Shepard, Secretary.
J. M. Greenwood, Treasurer.

1895.—DENVER, COLO.
Nicholas Murray Butler, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

1896.—BUFFALO, N. Y.
Newton C. Dougherty, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

1897.—MILWAUKEE, WIS.
Charles R. Skinner, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

1898.—WASHINGTON, D. C.
J. M. Greenwood, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

1899.—LOS ANGELES, CAL.
E. Oram Lyte, President.
Irwin Shepard, Secretary.
I. C. McNeill, Treasurer.

1900.—CHARLESTON, S. C.
Oscar T. Corson, President.
Irwin Shepard, Secretary.
Carroll G. Pearse, Treasurer.

1901.—DETROIT, MICH.
James M. Green, President.
Irwin Shepard, Secretary.
L. C. Greenlee, Treasurer.

1902.—MINNEAPOLIS, MINN.
William M. Beardshear, President.
Irwin Shepard, Secretary.
Charles H. Keyes, Treasurer.

NATIONAL EDUCATIONAL ASSOCIATION

OFFICERS FOR 1901–1902

GENERAL ASSOCIATION

W. M. BEARDSHEAR	*President*	Ames, Ia.
IRWIN SHEPARD	*Secretary*	Winona, Minn.
CHARLES H. KEYES	*Treasurer*	Hartford, Conn.

VICE-PRESIDENTS

James M. Green, Trenton, N. J.
W. C. Martindale, Detroit, Mich.
R. S. Bingham, Tacoma, Wash.
W. W. Chalmers, Toledo, O.
A. W. Norton, Sioux Falls, S. D.
J. L. Holloway, Fort Smith, Ark.
McHenry Rhoads, Owensboro, Ky.
Edmund Stanley, Wichita, Kan.
H. S. Tarbell, Providence, R. I.
S. D. Largent, Great Falls, Mont.
W. M. Slaton, Atlanta, Ga.
C. M. Woodward, St. Louis, Mo.

BOARD OF TRUSTEES

(See *Art. IV, sec. 9, of the constitution.*)

Nicholas Murray Butler	New York, N. Y.	Term expires July, 1902
Albert G. Lane, *Chairman*	Chicago, Ill.	Term expires July, 1903
Newton C. Dougherty	Peoria, Ill.	Term expires July, 1904
F. Louis Soldan	St. Louis, Mo	Term expires July, 1905
W. M. Beardshear	Ames, Ia.	*Ex officio*

EXECUTIVE COMMITTEE

(See *Art. IV, secs. 2 and 11, of the constitution.*)

W. M. Beardshear	*President*	Ames, Ia.
James M. Green	*First Vice-President*	Trenton, N. J.
Charles H. Keyes	*Treasurer*	Hartford, Conn.
Albert G. Lane	*Chairman Board of Trustees*	Chicago, Ill.
W. T. Harris	*Member by election*	Washington, D. C.
Irwin Shepard	*Secretary*	Winona, Minn.

BOARD OF DIRECTORS

Directors ex officio

(See *Art. IV, sec. 2, of the constitution.*)

W. M. Beardshear, Ames, Ia.
James M. Green, Trenton, N. J.
Charles H. Keyes, Hartford, Conn.
Albert G. Lane, Chicago, Ill.
Irwin Shepard, Winona, Minn.

Life Directors

(See *Art. IV, sec. 2, of the constitution.*)

Bicknell, Thomas W., Providence, R. I.
Board of Education, Nashville, Tenn.
Butler, Nicholas Murray, New York, N. Y.
Canfield, James H., New York, N. Y.
Cook, E. H., Boulder, Colo.
Corson, Oscar T., Columbus O.
Dougherty, Newton C., Peoria, Ill.
Garrett, W. R., Nashville, Tenn.
Gove, Aaron, Denver, Colo.
Graham, H. A., Mt. Pleasant, Mich.
Green, J. M., Trenton, N. J.
Greenwood, J. M., Kansas City, Mo.

Life Members—*continued*

Harris, W. T., Washington, D. C.
Hunt, Mary H., Boston, Mass.
Jewett, A. V., Abilene, Kan.
Lane, Albert G., Chicago, Ill.
Lyte, E. Oram, Millersville, Pa.
Marble, Albert P., New York, N. Y.
Marshall, T. Marcellus, Glenville, W. Va.
Parker, Charles I., South Chicago, Ill.
Phelps, W. F., Duluth, Minn.
Pickard, Josiah L., Brunswick, Me.
Pike, Joshua, Jerseyville, Ill.
Skinner, Charles R., Albany, N. Y.
Soldan, F. Louis, St. Louis, Mo.
Stratton, C. C., University Park, Ore.
Taylor, A. R., Decatur, Ill.
Teachers' Institute, Philadelphia, Pa.
White, Charles G., Lake Linden, Mich.
White, E. E., Columbus, O.
Wilson, J. Ormond, Washington, D. C.

Directors by Election

North Atlantic Division

Maine	John S. Locke	Saco
New Hampshire	J. E. Klock	Plymouth
Vermont	John L. Alger	Johnson
Massachusetts	Frank A. Fitzpatrick	Boston
Rhode Island	Walter Ballou Jacobs	Providence
Connecticut	Wilbur F. Gordy	Hartford
New York	Augustus S. Downing	New York
New Jersey	H. Brewster Willis	New Brunswick
Pennsylvania	George H. Stout	Philadelphia

South Atlantic Division

Delaware	George W. Twitmyer	Wilmington
Maryland	M. Bates Stephens	Baltimore
District of Columbia	Hosmer M. Johnson	Anacostia
Virginia	George J. Ramsey	Richmond
West Virginia	W. H. Anderson	Wheeling
North Carolina	Charles D. McIver	Greensboro
South Carolina	D. B. Johnson	Rock Hill
Florida	W. N. Sheats	Tallahassee

South Central Division

Kentucky	W. H. Bartholomew	Louisville
Tennessee	W. T. White	Knoxville
Georgia	M. L. Brittain	Atlanta
Alabama	John W. Abercrombie	Montgomery
Mississippi	J. R. Preston	Natchez
Louisiana	Warren Easton	New Orleans
Texas	J. M. Fendley	Galveston
Oklahoma	David R. Boyd	Norman
Arkansas	George B. Cook	Hot Springs

North Central Division

Ohio	J. M. H. Frederick	Lakewood
Indiana	T. A. Mott	Richmond
Illinois	Alfred Bayliss	Springfield
Michigan	D. W. Springer	Ann Arbor
Wisconsin	L. D. Harvey	Madison
Iowa	H. E. Kratz	Sioux City
Minnesota	Charles M. Jordan	Minneapolis
Missouri	W. T. Carrington	Jefferson City
North Dakota	W. E. Hoover	Park River
South Dakota	E. E. Collins	Vermilion
Nebraska	C. G. Pearse	Omaha
Kansas	Frank R. Dyer	Wichita

Western Division

Montana	W. W. Welch	Helena
Wyoming	Miss Estelle Reel	Washington, D. C.
Colorado	H. S. Philips	Denver

Directors by Election—*continued*

New Mexico	Hiram Hadley	Las Cruces
Arizona	F. Yale Adams	Tucson
Utah	W. J. Kerr	Logan
Nevada	J. E. Stubbs	Reno
Idaho	Miss Permeal French	Boise
Washington	Charles M. Sherman	Snohomish
Oregon	E. D. Ressler	Eugene
California	James A. Foshay	Los Angeles

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Miss MARY E. NICHOLSON	*Vice-President*	Indianapolis, Ind.
JESSE F. MILLSPAUGH	*Secretary*	Winona, Minn.
NICHOLAS MURRAY BUTLER	*Executive Committee*	New York, N. Y.
JOSEPH SWAIN	*Executive Committee*	Bloomington, Ind.
RICHARD G. BOONE	*Executive Committee*	Cincinnati, O.

Kindergarten

Miss C. GERALDINE O'GRADY	*President*	New York, N. Y.
Miss CLARA W. MINGINS	*Vice-President*	Detroit, Mich.
Miss MARY C. MAY	*Secretary*	Salt Lake City, Utah

Elementary

R. A. OGG	*President*	Kokomo, Ind.
J. J. DOYNE	*Vice-President*	Little Rock, Ark.
Miss ADDA P. WERTZ	*Secretary*	Carbondale, Ill.

Secondary

J. REMSEN BISHOP	*President*	Cincinnati, O.
W. F. WEBSTER	*Vice-President*	Minneapolis, Minn.
CHARLES ALDEN SMITH	*Secretary*	Duluth, Minn.

Higher

W. H. P. FAUNCE	*President*	Providence, R. I.
C. W. DABNEY	*Vice-President*	Knoxville, Tenn.
JOHN W. PERRIN	*Secretary*	Cleveland, O.

Normal

JESSE F. MILLSPAUGH	*President*	Winona, Minn.
MYRON TRACY SCUDDER	*Vice-President*	New Paltz, N. Y.
JOHN R. KIRK	*Secretary*	Kirksville, Mo.

Superintendence

G. R. GLENN	*President*	Atlanta, Ga.
H. P. EMERSON	*First Vice-President*	Buffalo, N. Y.
F. W. COOLEY	*Second Vice-President*	Calumet, Mich.
JOHN W. DIETRICH	*Secretary*	Colorado Sp'gs, Colo.

Manual

CHARLES R. RICHARDS	*President*	New York, N. Y.
CHARLES F. WARNER	*Vice-President*	Springfield, Mass.
J. H. TRYBOM	*Secretary*	Detroit, Mich.

Art

Miss MYRA JONES	*President*	Detroit, Mich.
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STERRIE A. WEAVER	*Vice-President*	Westfield, Mass.
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J. H. FRANCIS	*Vice-President*	Los Angeles, Cal.
TEMPLETON P. TWIGGS	*Secretary*	Detroit, Mich.

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H. E. KRATZ	*President*	Sioux City, Ia.
Miss JENNIE WARREN PRENTISS	*Vice-President*	Cleveland, O.
Miss KATE A. HOPPER	*Secretary*	Detroit, Mich.

Physical Training

W. O. KROHN	*President*	Chicago, Ill.
THEODORE TOEPEL	*First Vice-President*	Atlanta, Ga.
Miss M. AUGUSTA REQUA	*Second Vice-President*	New York, N. Y.
Miss MABEL L. PRAY	*Secretary*	Toledo, O.

Science

W. H. NORTON	*President*	Mt. Vernon, Ia.
Vacant	*Vice-President*	———
EDWARD M. LEHNERTS	*Secretary*	Winona, Minn.

School Administration

ISRAEL H. PERES	*President*	Memphis, Tenn.
Mrs. JOSEPHINE A. GOSS	*First Vice-President*	Grand Rapids, Mich.
L. D. BONEBRAKE	*Second Vice-President*	Columbus, O.
GEORGE FENTON	*Third Vice-President*	Broadalbin, N. Y.
WILLIAM GEORGE BRUCE	*Secretary*	Milwaukee, Wis.

Library

JAMES H. CANFIELD	*President*	New York, N. Y.
REUBEN POST HALLECK	*Vice-President*	Louisville, Ky.
Miss MARY EILEEN AHERN	*Secretary*	Chicago, Ill.

Deaf, Blind, etc.

ALEXANDER GRAHAM BELL	*President*	Washington, D. C.
EDWARD E. ALLEN	*Vice-President*	Overbrook, Pa.
ELBERT A. GRUVER	*Secretary*	New York, N. Y.

Indian Education

SAMUEL M. McCOWAN	*President*	Phœnix, Ariz.
H. B. FRISSELL	*Vice-President*	Hampton, Va.
Miss ESTELLE REEL	*Secretary*	Washington, D. C.

NATIONAL EDUCATIONAL ASSOCIATION

OFFICERS FOR 1902–1903

GENERAL ASSOCIATION

CHARLES W. ELIOT	*President*	Cambridge, Mass.
IRWIN SHEPARD	*Secretary*	Winona, Minn.
W. M. DAVIDSON	*Treasurer*	Topeka, Kan.

VICE-PRESIDENTS

*W. M. Beardshear, Ames, Ia.
Orville T. Bright, Chicago, Ill.
Charles F. Reeves, Latona, Wash.
Joseph Kennedy, Grand Forks, N. D.
Charles F. Thwing, Cleveland, O.
W. N. Sheats, Tallahassee, Fla.
Miss Marion Brown, New Orleans, La.
James B. Pearcy, Anderson, Ind.
Mrs. Helen L. Grenfell, Denver, Colo.
Henry R. Sanford, Penn Yan, N. Y.
J. H. Francis, Los Angeles, Cal.
Wallace G. Nye, Minneapolis, Minn.

BOARD OF TRUSTEES

(See *Art. IV, sec. 9, of the constitution.*)

Albert G. Lane, *Chairman*	Chicago, Ill.	Term expires July, 1903
Newton C. Dougherty	Peoria, Ill.	Term expires July, 1904
F. Louis Soldan	St. Louis, Mo.	Term expires July, 1905
Nicholas Murray Butler	New York, N. Y.	Term expires July, 1906
Charles W. Eliot	Cambridge, Mass	*Ex officio*

EXECUTIVE COMMITTEE

(See *Art. IV, secs. 2 and 11, of the constitution.*)

Charles W. Eliot	*President*	Cambridge, Mass.
Orville T. Bright	*First Vice-President*	Chicago, Ill.
W. M. Davidson	*Treasurer*	Topeka, Kan.
Albert G. Lane	*Chairman Board of Trustees*	Chicago, Ill.
W. T. Harris	*Member by election*	Washington, D. C.
Irwin Shepard	*Secretary*	Winona, Minn.

BOARD OF DIRECTORS

Directors ex officio

(See *Art. IV, sec. 2, of the constitution.*)

Charles W. Eliot, Cambridge, Mass.
Orville T. Bright, Chicago, Ill.
Charles H. Keyes, Hartford, Conn.
Albert G. Lane, Chicago, Ill.
Irwin Shepard, Winona, Minn.

Life Directors

(See *Art. IV, sec. 2, of the constitution.*)

*Beardshear, W. M., Ames, Ia.
Bicknell, Thomas W., Providence, R. I.
Board of Education, Nashville, Tenn.
Butler, Nicholas Murray, New York, N. Y.
Canfield, James H., New York, N. Y.
Cook, E. H., Boulder, Colo.
Corson, Oscar T., Columbus, O.
Dougherty, Newton C., Peoria, Ill.
Garrett, W. R., Nashville, Tenn.
Gove, Aaron, Denver, Colo.
Graham, H. A., Mt. Pleasant, Mich.
Green, J. M., Trenton, N. J.
Greenwood, J. M., Kansas City, Mo.
Harris, W. T., Washington, D. C.

* Deceased.

Life Directors—*continued*

Hunt, Mrs. Mary H., Boston, Mass.
Jewett, A. V., Abilene, Kan.
Lane, Albert G., Chicago, Ill.
Lyte, Eliphalet Oram, Millersville, Pa.
Marble, Albert P., New York, N. Y.
Marshall, T. Marcellus, Glenville, W. Va.
Parker, Charles I., South Chicago, Ill.
Phelps, W. F., Duluth, Minn.
Pickard, Josiah L., New Brunswick, Me.
Pike, Joshua, Jerseyville, Ill.
Skinner, Charles R., Albany, N. Y.
Soldan, F. Louis, St. Louis, Mo.
Stratton, C. C., University Park, Ore.
Taylor, A. R., Decatur, Ill.
Teachers' Institute, Philadelphia, Pa.
White, Charles G., Lake Linden, Mich.
White, E. E., Columbus, O.
Wilson, J. Ormond, Washington, D. C.

Directors by Election

North Atlantic Division

Maine	John S. Locke	Saco
New Hampshire	Henry C. Morrison	Portsmouth
Vermont	Walter E. Ranger	Montpelier
Massachusetts	George H. Martin	Lynn
Rhode Island	H. S. Tarbell	Providence
Connecticut	Charles H. Keyes	Hartford
New York	Augustus S. Downing	New York
New Jersey	H. Brewster Willis	New Brunswick
Pennsylvania	J. W. Lansinger	Millersville

South Atlantic Division

Delaware	George W. Twitmyer	Wilmington
Maryland	M. Bates Stephens	Baltimore
District of Columbia	Alexander T. Stuart	Washington
Virginia	H. B. Frissell	Hampton
West Virginia	M. M. Ross	Fairmont
North Carolina	G. H. Crowell	High Point
South Carolina	J. J. McMahan	Columbia
Florida	W. N. Sheats	Tallahassee

South Central Division

Kentucky	S. L. Frogge	Frankfort
Tennessee	J. L. Wright	Nashville
Georgia	W. F. Slaton	Atlanta
Alabama	J. W. Abercrombie	Montgomery
Mississippi	E. E. Bass	Greenville
Louisiana	Warren Easton	New Orleans
Texas	Alexander Hogg	Fort Worth
Oklahoma	David R. Boyd	Norman
Arkansas	George B. Cook	Hot Springs
Indian Territory	John D. Benedict	Muskogee

North Central Division

Ohio	J. K. Baxter	Mt. Vernon
Indiana	T. A. Mott	Richmond
Illinois	Miss Catharine Goggin	Chicago
Michigan	D. W. Springer	Ann Arbor
Wisconsin	L. D. Harvey	Madison
Iowa	A. V. Storm	Cherokee
Minnesota	Charles M. Jordan	Minneapolis
Missouri	W. T. Carrington	Jefferson City
North Dakota	W. E. Hoover	Park River
South Dakota	C. M. Young	Vermilion
Nebraska	Edwin J. Bodwell	Omaha
Kansas	J. W. Spindler	Winfield

Western Division

Montana	J. M. Lewis	Helena
Wyoming	Miss Estelle Reel	Washington, D. C.
Colorado	H. S. Philips	Denver

Directors by Election—*continued*

New Mexico	Edgar L. Hewett	Las Vegas
Arizona	F. Yale Adams	Tucson
Utah	W. J. Kerr	Logan
Nevada	J. E. Stubbs	Reno
Idaho	Walter R. Siders	Pocatello
Washington	F. B. Cooper	Seattle
Oregon	E. D. Ressler	Eugene
California	James A. Foshay	Los Angeles

DEPARTMENT OFFICERS

National Council

WILLIAM R. HARPER	*President*	Chicago, Ill.
W. H. BARTHOLOMEW	*Vice-President*	Louisville, Ky.
JESSE F. MILLSPAUGH	*Secretary*	Winona, Minn.
JOSEPH SWAIN	*Executive Committee*	Swarthmore, Pa.
RICHARD G. BOONE	*Executive Committee*	Cincinnati, O.
NICHOLAS MURRAY BUTLER	*Executive Committee*	New York, N. Y.

Kindergarten

Miss ANNA WILLIAMS	*President*	Philadelphia, Pa.
Miss STELLA L. WOOD	*Vice-President*	Minneapolis Minn.
Miss CLARA WHEELER	*Secretary*	Grand Rapids, Mich.

Elementary

Miss M. ADELAIDE HOLTON	*President*	Minneapolis, Minn.
FREDERICK TREUDLEY	*Vice-President*	Athens, O.
Miss ADDA P. WERTZ	*Secretary*	Carbondale, Ill.

Secondary

CHARLES F. WHEELOCK	*President*	Albany, N. Y.
REUBEN POST HALLECK	*Vice-President*	Louisville, Ky.
WILBUR F. GORDY	*Secretary*	Hartford, Conn.

Higher

BENJAMIN IDE WHEELER	*President*	Berkeley, Cal.
WILLIAM H. SMILEY	*Vice-President*	Denver, Colo.
JOHN H. MacCRACKEN	*Secretary*	Fulton, Mo.

Normal

LIVINGSTON C. LORD	*President*	Charleston, Ill.
ALBERT SALISBURY	*Vice-President*	Whitewater, Wis.
EDGAR L. HEWETT	*Secretary*	Las Vegas, N. M.

Superintendence

CHARLES M. JORDAN	*President*	Minneapolis, Minn.
CLARENCE F. CARROLL	*First Vice-President*	Worcester, Mass.
WARREN EASTON	*Second Vice-President*	New Orleans, La.
J. N. WILKINSON	*Secretary*	Emporia, Kan.

Manual

CHARLES F. WARNER	*President*	Springfield, Mass.
J. E. PAINTER	*Vice-President*	Minneapolis, Minn.
ARTHUR W. RICHARDS	*Secretary*	New York, N. Y.

Art

Miss CLARA A. WILSON	*President*	Davenport, Ia.
Miss CHARLOTTE W. STODDARD	*Vice-President*	Rochester, N. Y.
WILLIAM H. VOGEL	*Secretary*	Cincinnati, O.

Music

STERRIE A. WEAVER	*President*	Westfield, Mass.
W. A. WETZELL	*Vice-President*	Salt Lake City, Utah
Miss HELEN W. TRASK	*Secretary*	Minneapolis, Minn.

Business

J. H. FRANCIS	*President*	Los Angeles, Cal.
TEMPLETON P. TWIGGS	*Vice-President*	Detroit, Mich.
C. E. STEVENS	*Secretary*	Cleveland, O.

Child Study

G. W. A. LUCKEY	*President*	Lincoln, Neb.
STUART H. ROWE	*Vice-President*	New Haven, Conn.
Miss SUSAN F. CHASE	*Secretary*	Buffalo, N. Y.

Physical Training

W. O. KROHN	*President*	Chicago, Ill.
Baroness ROSE POSSE	*First Vice-President*	Boston, Mass.
Miss MABEL L. PRAY	*Second Vice-President*	Toledo, O.
Miss ALTA WIGGINS	*Secretary*	Buffalo, N. Y.

Science

C. W. HALL	*President*	Minneapolis, Minn.
WILBUR A. FISKE	*Vice-President*	Richmond, Ind.
FRANK M. GILLEY	*Secretary*	Chelsea, Mass.

School Administration

HARLAN P. FRENCH	*President*	Albany, N. Y.
ISRAEL H. PERES	*Chairman Executive Committee*	Memphis, Tenn.
WILLIAM GEORGE BRUCE	*Secretary*	Milwaukee, Wis.

Library

JAMES H. CANFIELD	*President*	New York, N. Y.
REUBEN POST HALLECK	*Vice-President*	Louisville, Ky.
Miss MARY EILEEN AHERN	*Secretary*	Chicago, Ill.

Special Education

EDWARD E. ALLEN	*President*	Overbrook, Pa.
Miss MARY McCOWEN	*Vice-President*	Chicago, Ill.
Miss SARAH FULLER	*Secretary*	Boston, Mass.

Indian Education

H. B. PEAIRS	*President*	Lawrence, Kan.
S. M. McCOWAN	*Vice-President*	Chilocco, Okla.
Miss ESTELLE REEL	*Secretary*	Washington, D. C.

TREASURER'S REPORT

TO THE

NATIONAL EDUCATIONAL ASSOCIATION

JULY 1, 1901, TO JULY 1, 1902

FOR MEETING AT DETROIT, MICH., AND ENSUING YEAR

Charles H. Keyes, Treasurer, in Acct. with the National Educational Association

BALANCE ON HAND

Cash received from Treasurer Greenlee, as per last annual report	$4.113.04

RECEIPTS

From transportation lines:			
Account of Los Angeles meeting.			
Southern Pacific Railroad Company		$ 10.00	
Account of Charleston meeting:			
Seaboard Air Line	$ 6.00		
Atlantic Coast Railway	22.00		
Southern Railway	85.00		
Plant System	102.00		
		215.00	
Account of Detroit meeting:			
Steamer Kirby	$ 8.00		
White Star Line	8.00		
Detroit Southern Railway	10.00		
Central Vermont Railway	24.00		
Cleveland & Buffalo Transit Company	66.00		
Toledo, St. Louis & Western Railroad	66.00		
Canadian Pacific Railway	78.00		
Pere Marquette Railroad	791.00		
Detroit & Cleveland Navigation Company	529.00		
Lake Shore & Michigan Southern Railway	527.00		
Grand Trunk Railway	960.00		
Wabash Railroad Company	3,372.00		
Michigan Central Railroad	6,008.00		
		12,447.00	
Total from transportation lines			12,672.00
From Board of Trustees:			
Interest on permanent fund		$4,841.22	
Taxes refunded on collateral property		558.84	
			5,400.06
From Department of Superintendence			698.10
From annual meeting:			
Receipts from Registration Bureau, Detroit meeting:			
Advance associate memberships (Detroit teachers)	$1,752.00		
Advance active memberships (Detroit teachers)	16.00		
		$1.768.00	
Advance associate memberships (Michigan teachers)	$ 604.00		
Advance active memberships (Michigan teachers)	12.00		
		616.00	
From registration treasurer:			
Associate memberships		956.00	
Dues of former active members		408.00	
New active memberships		746.00	
			4,494.00
From royalties on reports of Committees of Ten and Fifteen			52.90
From interest, Union National Bank, Denver, Colo.			50.45

From Secretary's office during the year:			
Memberships, enrollments, etc		$3,620.49	
Sale of back volumes		963.15	
Sale of committee reports		202.29	
			$ 4,785.93
Total receipts for the year			$32,266.48

DISBURSEMENTS

Board of Trustees:			
For taxes advanced to protect loan		$ 558.84	
For miscellaneous expenses		16.55	
			$ 575.39
Executive Committee:			
James M. Green, President, (1900–1):			
Traveling	$ 18.40		
Stenographer for year	90.00		
Stationery, postage, telegrams	30.00		
W. M. Beardshear, President (1901–2):			
Traveling, telegrams, etc	95.86		
		$ 234.26	
Oscar T. Corson, Vice-President, (1900–1):			
Traveling	$ 4.60		
James M. Green, Vice-President (1901–2):			
Traveling	108.24		
		112.84	
L. C. Greenlee, Treasurer, (1900–1):			
Traveling	$ 58.05		
Stationery, postage, etc	10.85		
Charles H. Keyes, Treasurer (1901–2):			
Traveling	122.65		
Stationery, clerical assistance, postage, etc	96.07		
		287.62	
A. G. Lane, chairman of Trustees:			
Traveling and postage		10.59	
W. T. Harris, member by election:			
Traveling		88.05	
			733.36
General Secretary's office:			
Salary of Secretary		$4,000.00	
Postage		764.80	
Telegrams		71.63	
Freight and express		20.09	
Clerical services		689.25	
Exchange		38.50	
Stationery and office supplies		114.15	
Traveling		148.40	
Miscellaneous		11.25	
			5,858.07
Printing:			
Volume of *Proceedings*		$4,707.99	
Reprints from volume		520.63	
Special reports		55.33	
Executive Committee bulletins		656.20	
Miscellaneous		461.27	
			6,391.42
Express and Freight:			
Distribution of volumes of *Proceedings*		$1,681.06	
Miscellaneous		150.90	
			1,831.96
Special Appropriations:			
Department of Superintendence		$ 792.67	
Committee on National University		90.17	
			882.84

Annual Convention.

Department Expenses:

School Administration	$ 25.00	Art	$ 25.00
Science Instruction	11.00	Music	20.00
Elementary	20.00	Physical	25.00
Secondary	25.00	Normal	5.00

Annual Convention, Department Expenses—*continued:*					
Council	$ 12.00	Child Study	$ 20.15		
Business	22.90	Library	8.50		
Manual Training	25.00	Kindergarten	21.40		
Higher	25.00			$ 291.00	
State Directors and Managers:					
Connecticut	$ 19.50	North Dakota	$ 14.10		
Washington	15.00	Kentucky	18.50		
Arkansas	18.85	New Jersey	20.00		
Ohio	20.00	Massachusetts	15.25		
Maryland	20.00	Nebraska	20.00		
Texas	10.00	Arizona	3.50		
Tennessee	18.00	Missouri	20.00		
Michigan	20.00	Alabama	18.00		
Idaho	5.10	Florida	19.85		
Wyoming	20.00	Indiana	20.00		
District of Columbia	15.00	Pennsylvania	20.00		
Iowa	9.75	Georgia	20.00		
Minnesota	20.00	Wisconsin	19.70		
West Virginia	10.50	Illinois	20.00		
New Mexico	10.00	Maine	5.75		
Oklahoma	10.80	New York	16.50		
Vermont	6.00	California	11.30		
South Dakota	17.70	Utah	7.85		
Kansas	20.00	Rhode Island	1.25		
Colorado	17.00			594.75	
Clerical Services:					
Registration			$ 603.05		
Stenographers and typewriting			70.00	673.05	
Badges				437.90	
Printing:					
Programs			$ 177.00		
Miscellaneous			56.93	233.93	
Express and Freight				4.25	
Stationery				33.65	
Speakers and expenses				615.19	
Telegrams				11.26	$2,894.98
Expenses of Depository:					
Rent				$ 100.00	
Salary of custodian				50.00	
Miscellaneous				3.05	153.05
Unclassified Expenses:					
Volumes *Proceedings* Washington meeting				$ 75.00	
Refunds on memberships				154.00	
Typewriter and desk for Secretary's office				120.00	
Plate for honorary members' certificates				142.50	
Premium on Treasurer's bond				40.00	
Expenses of official examiner of securities				21.05	
Printing certificates for honorary members				21.25	
Card Indexes, guides and boxes (Secretary's office)				12.79	
Amberg letter filing indexes (Secretary's office)				12.70	
Filing case for chairman of trustees				27.00	
Miscellaneous				31.98	658.27
Total expenses for the year					$ 19,979.34
Transferred to Permanent Fund for investment					10,000.00
Total disbursements					$ 29,979.34
Balance on hand, transferred to 1902-3					2,287.14
					$ 32,266.48

Net receipts for the year	$28,153.44
Expenses for the year	19,979.34
Excess of net receipts over disbursements	$ 8,174.10

MINNEAPOLIS, MINN., July 7, 1902.

The undersigned trustees of the National Educational Association have this day examined and approved the foregoing accounts of Mr. Charles H. Keyes, Treasurer, with all statements of receipts and vouchers for disbursements.

(Signed)
ALBERT C. LANE,
NICHOLAS MURRAY BUTLER,
NEWTON C. DOUGHERTY.

SIXTEENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES

To the Board of Directors of the National Educational Association:

The Board of Trustees presents the following report of the Permanent Fund of the National Educational Association, and its income, for the year ending June 30, 1902:

Permanent Fund, July 1, 1902:		
Mortgages on real estate	$37,500.00	
Kansas school and municipal bonds	15,100.00	
Illinois, Indiana, and Missouri school bonds	31,500.00	
Cash on hand for investment	3,900.00	
Total		$88,000.00
Received from Charles H. Keyes, Treasurer, from proceeds of Detroit meeting and income from Permanent Fund		10,000.00
Total		$98,000,00
Permanent Fund, July 1, 1902:		
In the following items:		
Mortgages on real estate	$44,600,00	
Kansas school and municipal bonds	12,200.00	
Illinois, Indiana, and Missouri school bonds	28,000.00	
Total	$84,800.00	
Cash on hand for investment	13,200.00	
Total		98,000.00

INVESTMENTS

Investments, July 1, 1901		84,100.00
Paid during the year:		
First mortgage, 4802 Lake avenue, Chicago	$ 1,400.00	
Lemont, Ill., Bond 8	500.00	
Reno county, Kan., S. D. 51	500.00	
Reno county, Kan., S. D. 129	300.00	
Eudora City, Kan., Bond No. 10	100.00	
DeKalb, Ill., Bond No. 3	1,000.00	
Montgomery county, Caney township, Kan	1,000.00	
Kansas City, Mo	2,000.00	
Marion City, Kan	1,000.00	
		7,800.00
Balance of Investments		$76,300.00
Investments during the year:		
First mortgage, 1199 Irving Park boulevard, Chicago	$ 3,500.00	
First mortgage, 512 N. LaSalle street, Chicago	5,000.00	
		8,500.00
Total investments, July 1, 1902		$84,800.00

INCOME STATEMENT

Receipts from interest:	
Ness county, Kan., S. D. 41	$ 12.00
Ness county, Kan., S. D. 70	30.00
Norton county, Kan., S. D. 95	12.00

Income Statement—*continued*

Reno county, Kan., S. D. 51	$ 45.00	
Reno county, Kan., S. D. 129	18.00	
City of Eudora, Kan	66.00	
Hodgeman county, Kan	60.00	
McPherson county, Kan., Sharp's Creek township	60.00	
Montgomery county, Kan., Caney township	50.00	
Kansas City, Mo	50.00	
Noblesville, Ind	250.00	
DeKalb, Ill	50.00	
Morgan Park, Ill	220.32	
Lemont, Ill	125.00	
First mortgage, Providence, R. I	270.00	
First mortgage, 1919 Wabash avenue, Chicago	328.35	
First mortgage, 5136 Hibbard avenue, Chicago	250.00	
First mortgage, 5603 Madison avenue, Chicago	250.00	
First mortgage, First Universalist Church, Englewood	500.00	
First mortgage, 4762 Lake avenue, Chicago	125.00	
First mortgage, 4802 Lake avenue, Chicago	225.00	
Chicago improvement bonds	1,260.80	
Marion City, Kan., past due interest	371.25	
First mortgage, 512 N. LaSalle street, Chicago	125.00	
First mortgage, 1199 Irving Park boulevard, Chicago	87.50	
Total interest transferred to Charles H. Keyes, Treasurer		$ 4,841.22
Taxes refunded, 1919 Wabash avenue, Chicago		558.84
Total Receipts		$ 5,400.06

Memorandum of disbursements (See Treasurer's Report):

Paid exchange for coupon collection	$ 2.25	
Paid express charges on bonds	4.30	
Paid rent of box, Merchants' Safe Deposit Co., Chicago	10.00	
Paid taxes on 1919 Wabash avenue, Chicago	558.84	
Total		$ 575.39

STATEMENT OF SECURITIES AND BONDS BELONGING TO THE PERMANENT FUND OF THE NATIONAL EDUCATIONAL ASSOCIATION, JULY 1, 1902

KANSAS SCHOOL BONDS

County	Number school district	Amount	Rate of interest per cent.	Interest payable	Bond due
Garfield*	24	$ 800	6	Jan. and July	Jan., 1910
Ness	41	200	6	"	July, 1905
Ness	70	500	6	"	July, 1903
Norton	95	200	6	"	July, 1902
Reno	51	500	6	"	July, 1902
		$2,200			

KANSAS COUNTY AND MUNICIPAL BONDS

County	Kind of bond	Bond Nos.	Amount	Interest per cent.	Interest payable	Bond due
Douglass	Eudora City	11 to 20	$1,000	6	March	One due each year March 1
Grant*	County	47, 48	2,000	6	Jan. and July	February, 1920
Hodgeman	County	1	1,000	6	Jan. and July	July 1, 1918
Lane*	County	11 to 13	3,000	6	Jan. and July	July 1, 1918
McPherson	Sharp's Creek Tp.	1	1,000	6	Jan. and July	Sept. 1, 1916
Reno*	City South Hutchinson	1, 2	1,000	7	Feb. and Aug.	April, 1908
Seward*	With Bentley & Hatfield, Wichita, Kan.	....	1,000	...	Judgm't obtain'd	....
			$10,000			

*Interest or principal in default.

ILLINOIS, INDIANA, AND MISSOURI SCHOOL BONDS

County	Amount	Rate of interest	Interest payable	Bond due
Noblesville, Ind	$ 5,000	5	Jan. and July	July 1, 1912
Cook, village of Morgan Park, Ill.	3,500	5	Mar. and Sept.	Sept., 1905
Lemont, Ill., School Nos. 12, 14, 16, 18, 20, 22, 24, 30, 32	4,500	5	June and Dec.	$1,000 yearly Dec. 1
Chicago improvement bonds	15,000	6	December	Dec., 1902–3 and 4
	$28,000			
REAL ESTATE				
Providence real estate, first mortgage	$ 3,000	6		
First mortgage, 1919 Wabash ave., Chicago.	5,000	5	May and Nov. 1	May 1, 1903
First mortgage, 5136 Hibbard ave., Chicago	5,000	5	May and Nov. 1	Nov. 1, 1903
First mortgage, 5603 Madison ave., Chicago	5,000	5	Jan. and July	July 1, 1905
First mortgage, First Universalist Church, Englewood, Ill	10,000	5	Oct. and April	Oct., 1905
First mortgage, 4762 Lake ave., Chicago	5,000	5	Mar. and Sept.	Mar., 1905
First mortgage, 4802 Lake ave., Chicago	3,100	5	Mar. and Sept.	Mar., 1905
First mortgage, 512 LaSalle st., Chicago	5,000	5	April and Oct.	Oct., 1906
First mortgage, 1199 Irving Park boul	3,500	5	Jan. and July	July 1906
	$44,600			

Respectfully submitted,

ALBERT G. LANE, *Chairman*,
NICHOLAS MURRAY BUTLER,
NEWTON C. DOUGHERTY,
WILLIAM M. BEARDSHEAR,
Board of Trustees.

The foregoing securities were examined at the Merchants' Safety Deposit Vaults, Chicago, September 22, 1902, and I certify that it is a correct statement of the investments belonging to the Permanent Fund of the National Educational Association in the custody of A. G. Lane, chairman of the Board of Trustees.

(Signed) EDWARD C. DELANO,
Examiner.

JOURNAL OF PROCEEDINGS

OF THE

FORTY-FIRST ANNUAL MEETING

OF THE

NATIONAL EDUCATIONAL ASSOCIATION

MINNEAPOLIS, MINN., JULY 8-11, 1902

FIRST DAY'S PROCEEDINGS

OPENING SESSION.—TUESDAY, JULY 8, 2:30 P. M.

The convention met in the auditorium of the Exposition Building at 2:30 P. M., and was called to order by Wallace G. Nye, chairman Convention Committee, Commercial Club of Minneapolis.

After music by the Masonic Quartette of Minneapolis, prayer was offered by Rev. M. D. Shutter, Church of the Redeemer, of Minneapolis.

Adresses of welcome were delivered by Hon. S. R. Van Sant, governor of Minnesota; Hon. J. W. Olsen, state superintendent of public instruction; Hon. David P. Jones, president of the Common Council of Minneapolis, in the absence of the mayor; Charles M. Jordan, superintendent of city schools, Minneapolis; Cyrus Northrop, president of the University of Minnesota.

Music — vocal solo, "Three Singers," *Berthold Tours;* Mr. Addison Madeira.

The conduct of the meeting was then transferred to Second Vice-President W. C. Martindale, of Detroit, Mich., who explained the absence of President W. M. Beardshear on account of serious illness which confined him to his room at the West Hotel in the city; and of the first vice-president, James M. Green, of Trenton, N. J., on account of having been recalled, while *en route* to Minneapolis, by the death of his mother.

The statement was made that the illness of President Beardshear, while serious, was regarded as temporary, and it was hoped that he would be able to preside at later sessions.

Responses to the addresses of welcome were delivered by James A. Foshay, superintendent of schools, Los Angeles, Cal.; Dr. Theodore B. Noss, principal of State Normal School, California, Pa.; Dr. Joseph Swain, president of Indiana University, Bloomington, Ind.

The Committee on Resolutions was announced as follows:

E. H. Mark, superintendent of schools, Louisville, Ky., *Chairman.*

Alfred Bayliss, state superintendent of public instruction, Springfield, Ill.

Charles R. Skinner, state superintendent of public instruction, Albany, N. Y.

F. Louis Soldan, superintendent of schools, St. Louis, Mo.

R. C. Barrett, state superintendent of public instruction, Des Moines, Ia.

N. C. Schaeffer, state superintendent of public instruction, Harrisburg, Pa.

H. O. R. Siefert, superintendent of schools, Milwaukee, Wis.

Charles D. McIver, president State Normal and Industrial College, Greensboro, N. C.

Insley L. Dayhoff, county superintendent of schools, Hutchinson, Kan.

After announcement by the Secretary of the places of meeting of the active members of the respective states to select members of the general nominating committee, the meeting adjourned until 8 o'clock P. M.

SECOND SESSION.—TUESDAY, JULY 8, 8:00 P. M.

The meeting was called to order by Vice-President Martindale.

Music—vocal solo, "Aria" from Ernani, *Verdi;* Miss Amalie Rippe; accompanist, Miss Grace Tilton.

The President's address was omitted from the program on account of the continued illness of President Beardshear, but by authority of the Executive Committee it appears among the printed papers of the session.

Dr. Nicholas Murray Butler, president of Columbia University, delivered an address on "Some Pressing Problems," and was followed by President Edwin A. Alderman, of Tulane University, New Orleans, La., on "The Work of the Southern Education Board."

Music—"In Absence," *Dudley Buck;* The Minnesota Quartette.

Adjournment was taken until Wednesday evening at 8 o'clock P. M.

SECOND DAY'S PROCEEDINGS

THIRD SESSION.—WEDNESDAY, JULY 9, 8:00 P. M.

The meeting was called to order by Vice-President Martindale.

Music—"Pilgrims' Chorus" (Tannhauser), *Wagner;* The North High School Chorus.

The Committee on Nominations was announced by the Secretary as authorized by President Beardshear, whose continued illness prevented his being present at the meeting.

COMMITTEE ON NOMINATIONS

H. BREWSTER WILLIS, of New Jersey, *Chairman*

C. W. Daugette	Alabama
S. M. Woodward	Arizona
George B. Cook	Arkansas
J. H. Francis	California
L. C. Greenlee	Colorado
Wilbur F. Gordy	Connecticut
George W. Twitmyer	Delaware
Alexander Graham Bell	District of Columbia
W. N. Sheats	Florida
W. F. Slaton	Georgia
James A. McLean	Idaho
Mrs. Mary D. Olsen	Illinois
H. B. Brown	Indiana
John D. Benedict	Indian Territory
Samuel H. Sheakley	Iowa
Frank Nelson	Kansas
W. H. Bartholomew	Kentucky
Miss Marion Brown	Louisiana
John S. Locke	Maine
James H. Van Sickle	Maryland
A. E. Winship	Massachusetts
W. C. Martindale	Michigan
A. N. Farmer	Minnesota
E. E. Bass	Mississippi
Ben. T. Blewett	Missouri
S. D. Largent	Montana
James W. Searson	Nebraska
James C. Doughty	Nevada
Henry C. Morrison	New Hampshire
H. Brewster Willis	New Jersey
Edgar L. Hewett	New Mexico
Nicholas Murray Butler	New York
Charles D. McIver	North Carolina
W. L. Stockwell	North Dakota
J. M. H. Frederick	Ohio
L. W. Cole	Oklahoma
E. D. Ressler	Oregon
E. O. Lyte	Pennsylvania
W. H. P. Faunce	Rhode Island
John J. McMahan	South Carolina
George M. Smith	South Dakota
Miss M. V. Glase	Tennessee
Charles T. Alexander	Texas
J. H. Paul	Utah
Walter E. Ranger	Vermont
H. B. Frissell	Virginia
Charles S. Tilton	Washington
M. M. Ross	West Virginia
R. H. Halsey	Wisconsin
Miss Estelle Reel	Wyoming

Hon. Michael Ernest Sadler, director of Inquiries and Reports, Education office, London, England, delivered an address on "A Statement of the English Ideal of Education and of England's Debt to America."

"Devotion to Truth: the Chief Virtue of the Teacher," was the subject of an address by Rt. Rev. John Ireland, archbishop of St. Paul, St. Paul, Minn.

Adjournment was taken to Thursday, A. M., at 9:30 o'clock.

THIRD DAY'S PROCEEDINGS

FOURTH SESSION.— Thursday, July 10, 9:30 a. m.

The convention met at 9:30 o'clock, and was called to order by Vice-President Martindale.

Music — vocal solo, "Elsa's Dream" (Lohengrin), *Wagner;* Miss Ednah F. Hall.

Prayer was offered by Rev. James S. Montgomery of the Wesley M. E. Church.

Hon. James Wilson, U. S. Secretary of Agriculture, Washington, D. C., presented an address on the "Education of the American Farmer."

"Higher Education and the Home" was the subject of an address by Mrs. Carrie Chapman Catt, of New York city.

The closing address of the morning was by President Jacob Gould Schurman of Cornell University, Ithaca, N. Y., on "Education in the Philippines."

After adjournment at 11:30 o'clock the annual meeting of active members for the election of officers and the transaction of other business was called to order by Vice-President Martindale.

MINUTES OF ANNUAL BUSINESS MEETING OF ACTIVE MEMBERS OF THE NATIONAL EDUCATIONAL ASSOCIATION

The annual business meeting of active members was called to order in the auditorium of the Exposition Building, Minneapolis, Minn., at 11:30 a. m., July 10, 1902, Vice-President W. C. Martindale, of Detroit, Mich., presiding.

The annual report of the Treasurer was presented by Treasurer Charles H. Keyes, of Hartford, Conn., and copies of the same distributed to the members present.

On motion of I. C. McNeill, of West Superior, Wis., the reading of the report was dispensed with, the statement being made that the report had already been adopted by the Board of Directors of the Association.

The report was then, on motion, accepted and ordered printed in the annual volume of *Proceedings.*

The report of the Board of Trustees was presented by Chairman A. G. Lane, of Chicago. Copies of the report were distributed to the members present.

On motion, the reading of the report was dispensed with, and the same approved and ordered printed in the annual volume of *Proceedings.*

The following report of the Committee on Nominations was presented by Chairman H. Brewster Willis, of New Jersey:

REPORT OF THE COMMITTEE ON NOMINATIONS

Minneapolis, July 10, 1902.

The Committee on Nominations begs leave to make the following report: For—

President	Charles W. Eliot	Massachusetts
Treasurer	W. M. Davidson	Kansas
First Vice-President	W. M. Beardshear	Iowa
Second Vice-President	Orville T. Bright	Illinois
Third Vice-President	Charles F. Reeves	Washington
Fourth Vice-President	Joseph Kennedy	North Dakota
Fifth Vice-President	Charles F. Thwing	Ohio
Sixth Vice-President	W. N. Sheats	Florida
Seventh Vice-President	Miss Marion Brown	Louisiana
Eighth Vice-President	J. B. Pearcy	Indiana
Ninth Vice-President	Mrs. Helen L. Grenfell	Colorado
Tenth Vice-President	Henry R. Sanford	New York
Eleventh Vice-President	J. H. Francis	California
Twelfth Vice-President	Wallace G. Nye	Minnesota

BOARD OF DIRECTORS

Alabama	J. W. Abercrombie
Arizona	F. Yale Adams
Arkansas	George B. Cook
California	George F. James
Colorado	H. S. Philips
Connecticut	Charles H. Keyes
Delaware	George W. Twitmyer
District of Columbia	Alexander T. Stuart
Florida	W. N. Sheats
Georgia	W. F. Slaton
Idaho	Walter R. Siders
Illinois	Miss Catharine Goggin
Indiana	T. A. Mott
Indian Territory	
Iowa	A. V. Storm
Kansas	J. W. Spindler
Kentucky	S. L. Frogge
Louisiana	Warren Easton
Maine	John S. Locke
Maryland	M. Bates Stephens
Massachusetts	George H. Martin
Michigan	W. C. Martindale
Minnesota	Charles M. Jordan
Mississippi	H. L. Whitfield
Missouri	W. T. Carrington
Montana	J. M. Lewis
Nebraska	Edwin J. Bodwell
Nevada	J. E. Stubbs
New Hampshire	Henry C. Morrison
New Jersey	H. Brewster Willis
New Mexico	Edgar L. Hewett
New York	Augustus S. Downing
North Carolina	G. H. Crowell
North Dakota	W. E. Hoover
Ohio	J. K. Baxter
Oklahoma	David R. Boyd
Oregon	E. D. Ressler
Pennsylvania	J. W. Lansinger
Rhode Island	H. S. Tarbell
South Carolina	J. J. McMahan
South Dakota	C. M. Young
Tennessee	J. L. Wright
Texas	Alexander Hogg
Utah	W. J. Kerr
Vermont	W. E. Ranger
Virginia	H. B. Frissell
Washington	F. B. Cooper
West Virginia	M. M. Ross
Wisconsin	L. D. Harvey
Wyoming	Miss Estelle Reel

H. Brewster Willis, *Chairman.*

A. E. Winship, *Secretary.*

Mr. Joseph Carter, of Illinois, moved that the report be amended by the appointment of a director for Indian Territory. On motion of A. G. Lane, of Chicago, John D. Benedict was nominated as such director.

Mr. W. C. Martindale, of Michigan, asked the privilege of withdrawing his own name as nominee for director for Michigan, and of substituting that of D. W. Springer, of Ann Arbor, Mich. On motion, the request of Mr. Martindale was granted.

The Secretary of the Association was, on motion, authorized to cast the ballot of the members for the report of the nominating committee as amended. The ballot being so cast, Chairman Martindale declared the nominees elected as officers for the ensuing year.

There being no further business, the meeting adjourned.

Irwin Shepard, *Secretary.*

FOURTH DAY'S PROCEEDINGS

FIFTH SESSION.—Friday, July 11, 9:30 A. M.

The Association was called to order by Vice-President H. S. Tarbell, of Providence, R. I.

Music — cornet solo, Mr. Byron Morgan.

Prayer — Rev. James M. Nichol, Andrew Presbyterian Church.

The following constituted the program of addresses for the session:

"How the School Strengthens the Individuality of the Pupil," Hon. W. T. Harris, Commissioner of Education of the United States, Washington, D. C.

"The Simplification of English Spelling a Present Duty," Charles Payson Gurley Scott, etymological editor of the *Century Dictionary*, Radnor, Pa.

"The Educational Value of Training in Spoken English," Thomas Clarkson Trueblood, professor of elocution and oratory, University of Michigan, Ann Arbor, Mich.

Discussion was led by Carroll Gardner Pearse, superintendent of city schools, Omaha, Neb.

Adjourned to 8 o'clock P. M.

SIXTH SESSION.—FRIDAY, JULY 11, 8. P. M.

The closing session of the forty-first convention was called to order in the Exposition auditorium at 8 o'clock P. M., by Vice-President Martiudale.

Vocal Solo—"My Heart is Weary," *Goring Thomas;* Mrs. E. W. French.

Dr. C. M. Lacey Sites, secretary of the Educational Association of China and special delegate to the forty-first annual convention of the National Educational Association, presented greetings from the Educational Association of China, and delivered a brief address on "Educational Conditions and Progress in China."

An address was then given by Dr. John Huston Finley, formerly president of Knox College, now professor of politics, Princeton University, Princeton, N. J.

The Committee on Resolutions presented the following report:

REPORT OF THE COMMITTEE ON RESOLUTIONS

DECLARATION OF PRINCIPLES

The teachers and friends of education, at this, the forty-first annual meeting of the National Educational Association, make the following statement of principles:

1. On account of the increased responsibilities placed on the United States Bureau of Education in the organization and administration of public-school systems in the recently added territory of the United States, in successfully conducting an extensive system of Indian schools, and in aiding the various states and territories in securing good and efficient school systems, we urge upon Congress the necessity for organizing the bureau upon broader lines and clothing the Commissioner with higher and more definite powers. We believe that the time has come for the recognition of the great importance of the educational interests of the country in the conduct of state affairs by the organization of the Department of Education as an independent department, taking equal rank with other departments.

2. We reiterate the statement, which has so often been made in the declaration of principles of this Association, that the common schools of this country are for the education of all the children. They are the one great agency upon which the nation is to rely for a barrier against the setting up of "class distinctions which have no place on American soil." In them every child must be given an equal chance to acquire such education as will give it an individuality and make it a thoughtful factor in the development and management of social and state affairs. We believe that a conservative but efficient compulsory-education law, with the proper regulation of child labor, is necessary to the complete realization of a good common-school system. While we deplore the conditions which seem to make it necessary sometimes to employ children in factories and workshops, we condemn the practice of such employment and ask for the enactment of such laws by each state as will give to these children the chance of acquiring a common-school education, of which they are now deprived.

3. We heartily commend every step which may be taken for increasing the necessary qualifications of teachers, and hope soon to see as definite a standard for the training of teachers as is now fixed by the best schools in the country for the training of physicians or lawyers. We believe that the fixing of such a standard and a strict adherence to it would elevate the work of the teacher to that of a profession. We further commend any movement that may be inaugurated for securing uniformity of requirements in the training and the licensing of teachers in the various states and territories, and which would bring about a just recognition by these states and territories of the diplomas or certificates granted under this system. The crossing of the boundary line of any state should no longer be assumed to nullify the qualifications of the skilled teacher and the expert supervisor, or the scholastic fitness of men and women whose energies are devoted to the cause of education.

4. Again we would plead for unity of effort for the complete education of the child, constantly keeping in mind that the present division of the work of instruction into elementary, secondary, and higher is for administrative purposes only. The character of the work is not to be influenced by any such division. The growth of the child thru education into full manhood or womanhood is to be a continuous process, marred by no imaginary lines of division. We are glad to note that many of the colleges and universities of the country are obliterating one of these lines by the acceptance of good high-school work as a standard for entrance without examination, thereby admitting that the efficiency of a school system is to be judged by the character and the intellectual power of its pupils, and not by their ability to meet a series of technical tests which in many instances may show ability to memorize the printed page instead of power to think and act.

5. We believe that it is both just and possible to keep the country schools in the forefront and, in all respects, up to the highest standard of excellence and efficiency. The movement to consolidate the weaker districts in the country, and to provide public and free transportation for the pupils to and from the schools, tends to that end. We, therefore, congratulate those states which have been pioneers in demonstrating the possibilities of this mode of reorganization, and renew our indorsement and commendation of it as the best plan yet proposed in relief of the isolated one-room schools. We believe that justice and fair play require that high-school opportunities should be as ample and free to the country children as they are fast coming to be to the children of every progressive urban community.

6. We commend to all local authorities the necessity of greater care in the arrangement of courses of study, that they may be adapted to the pupils to be instructed, rather than that pupils should be adapted to a fixed course of study and an inflexible system of grading. We hold that the individuality of the pupil should be carefully considered, to the end that he may be instructed in the light of his limitations and capacity. We urge greater thoroness in instruction in the so-called elementary subjects, rather than enrichment of courses already overtaxed, at the expense of thoro and satisfactory work.

7. We regard true education as inseparable from morality, and believe that the public school is the recognized agency to make the relation binding. We urge public-school authorities of the country, teachers, and parents to give strict attention to moral instruction in our schools as the true foundation of character and citizenship. Every consideration of good public policy and healthful social conditions points to the necessity of such instruction; the testimony of educational leaders justifies it, and an overwhelming public opinion demands it. We plead not for sectarian training of any kind, but for that moral instruction which must underlie true life and character.

8. It is apparent that familiarity with the English Bible as a masterpiece of literature is rapidly decreasing among the pupils in our schools. This is the direct result of a conception which regards the Bible as a theological book merely, and thereby leads to its exclusion from the schools of some states as a subject of reading and study. We hope for such a change of public sentiment in this regard as will permit and encourage the reading and study of the English Bible, as a literary work of the highest and purest type, side by side with the poetry and prose which it has inspired and in large part formed.

We do not urge this in the interest of sectarian instruction of any kind, but that this great book may ever be the teacher's aid in the interpretation of history and literature, law and life — an unrivaled agency in the development of true citizenship as well as in the formation of pure literary style.

9. We commend the examples of the boards of education whose settled policy is to employ teachers upon merit only, without reference to political or other considerations. We look with alarm upon any attempt to use the public schools as a means of gain by foisting on the patrons of these schools text-books selected by those wholly unfamiliar

with the needs and demands of the schools. We appeal to the public and the press to resist all such attacks, and we pledge our best efforts to secure absolutely non-political and non-sectarian conduct of the public schools.

10. While there has been great improvement in the construction of school buildings, and better lighting, heating, ventilation and seating have been provided, yet there is great room for further improvement, and many questions with reference to the most important problems of school architecture, hygiene, and sanitation are still unanswered. We believe there should be a commission created by this body whose duty it shall be to collect all the best information extant on the construction of school buildings and matters pertaining to school hygiene and sanitation, and publish it in a form which will be available for use by school authorities. We believe the good of every community demands that there shall be a regular, skilled inspection of schools in order to protect both the pupils and the community from the spread of contagious diseases, as well as to detect and correct ailments in children which interfere with their mental progress. We further urge that teachers be given such instruction in school hygiene as will make them familiar with many of the physical defects of children and, if possible, with the means of correcting them.

11. Recognizing the necessity of making many changes from year to year in our educational system in order to meet the demands of our social and industrial conditions, and to keep pace with the improvements in both methods and administration, we believe that the committees known as "The Committee on Secondary Education," "The Committee on Elementary Education," and "The Committee on Rural Schools" should be re-created as standing committees, to perform such duties as were prescribed for them under the resolutions creating them. Each committee to consist of twelve members, four to serve for one year, four for two years, and four for three years; after the first appointment, the vacancies to be filled by appointment for a term of three years. These committees should make report to the Association from time to time as the growth in education and the changes due to conditions may demand.

12. We believe that a proper conception of what educational work can do for the community and state can best be inculcated by a thoroly wide awake teaching profession, therefore we cordially indorse the organization of summer schools thruout the country for the instruction and training of teachers by the leading educators. These schools should be centers from which should emanate higher standards of teaching and consequently a better system of schools, thereby securing a sound and intelligent public opinion for the support of these schools and higher ideals for the life of those educated in them.

E. H. MARK, superintendent of schools, Louisville, Ky., *Chairman;*
ALFRED BAYLISS, state superintendent of public instruction, Springfield, Ill.;
CHARLES R. SKINNER, state superintendent of public instruction, Albany, N. Y.;
R. C. BARRETT, state superintendent of public instruction, Des Moines, Ia.;
H. O. R. SIEFERT, superintendent of schools, Milwaukee, Wis.;
C. D. McIVER, president of State Normal and Industrial College, Greensboro, N. C.;
INSLEY L. DAYHOFF, county superintendent of schools, Hutchinson, Kan.;
Committee on Resolutions.

On motion of Chairman Mark the above Declaration of Principles was adopted by the Association without dissent.

The following resolutions were offered by Chairman Mark on behalf of the Committee on Resolutions, and were unanimously adopted:

Resolved, That the National Educational Association recognizes and appreciates the rapidly growing tendency on the part of men and women of wealth to invest largely in educational work of all kinds.

In addition to the regular donations from various sources to our great educational institutions, to which we have become accustomed during the past several years, and in addition to the great library investments, the past year has witnessed the inauguration of two most important and significant educational movements.

The first is the donation of $10,000,000 to the United States for the establishment at Washington of a great institution for scientific research.

The second is the organization of the Southern Education Board and the General Education Board for the purpose of aiding in the work of universal education in the United States, and at present operating in the southern states.

In no portion of this country has more heroic work been done for public education than has been done in the southern states during the past two decades. In spite of poverty, sparseness of population, and the maintenance of a double school system for two races thousands of years apart in their development, these states have shown a remarkable and persistent determination to provide the best educational facilities for all their people. It is therefore not to be wondered at, tho it is none the less gratifying, that generous-hearted men outside that section should have asked the privilege of aiding in the accomplishment of its stupendous task.

The organization of these boards, composed of patriotic citizens of various sections of the country, and operating thro leading men now actively working in the southern field, is an omen of good to the people of the entire country, and this Association desires to indorse as strongly as possible the work undertaken and the spirit of all who have aided in its inauguration.

Resolved, That the cause of education in every land is to be congratulated upon the fact that the International Exposition to be held in the city of St. Louis in 1904 is projected on purely educational lines, and with this avowed purpose has received the support of the states of the Union, of the national government, and of foreign nations; and it is noted with particular satisfaction that the exposition authorities have, in their official classification, given to education, Group 1, the post of honor, and in addition thereto have established its relative rank as an exposition topic by assigning to education, for the first time in the history of international expositions, a separate and adequate building.

This Association desires to express its appreciation of the liberal and scientific policy thus outlined by the exposition authorities, and to pledge to the full extent of its powers and purposes its hearty support.

Resolved, That we tender to Michael Ernest Sadler, M.A., LL.D., Director of Inquiries and Reports in the Education Office, London, England, an expression of our high appreciation of his masterly address before our Association, as well as our cordial thanks for the inspiration of his presence thruout our meetings and his participation so freely and generously in them.

The committee desires to offer the following resolution:

Resolved, That the thanks of this Association are due, and are hereby most cordially tendered, to the members of the Commercial Club, especially to Mr. Wallace G. Nye and his associates on the General Committee, to Superintendent C. M. Jordan and his able corps of teachers, and to the faculties of the university for the admirable arrangements which have been made for the accommodation of the Association and its various departments, and for the entertainment of its members; to the newspapers for the full and accurate reports of the proceedings; to the railroads for their co-operation, which was so essential to the success of this meeting; to the Remington Typewriter Company and their skilled representative, Miss M. E. Orr, and her assistants, for the expert service which has been so freely given to the officers and members of the Association; and to all residents of this beautiful city and state who have in any way contributed to the success of this meeting, for their cordial assistance in the advancement of the cause of education.

The Association desires to refer particularly to the services of the teachers, pupils, and their friends who have so self-sacrificingly given their services at the various headquarters and meeting places in looking after the comfort of the members.

Resolved, That we convey to the retiring president, Dr. W. M. Beardshear, our deepest sympathy in his severe affliction brought on by his earnest efforts to provide for a successful meeting of this Association and we desire to assure him of the great confidence and esteem in which he is held by the Association, and of the heartfelt and sincere desire so frequently expressed for his speedy recovery. We wish to thank him for the excellent program which he prepared.

Resolved, That we desire to convey to Vice-President W. C. Martindale, of Michigan, upon whom devolved the arduous duty of presiding over the meetings of the Association under most trying conditions, and to the retiring Treasurer, Superintendent Charles H. Keyes, of Connecticut, our cordial thanks for the ability and devotion with which they have served the Association.

The following telegram from the President-elect was read:

NORTH EAST HARBOR, MAINE, July 10, 1902.

Irwin Shepard, Secretary N. E. A., Minneapolis, Minn.:

I accept the presidency of the National Educational Association for next year and thank the Association for the high honor conferred.

(Signed) CHARLES W. ELIOT.

After brief closing remarks by Vice-President Martindale, and an announcement of the favorable progress of President Beardshear toward recovery from his painful illness, the forty-first convention was closed with a benediction.

IRWIN SHEPARD, *Secretary*.

MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS FOR 1901–1902

MINNEAPOLIS, MINN., JULY 8, 1902

The annual meeting of the Board of Directors was called to order in the Minneapolis Whist Club Parlors, Andrus Building, at 11:30 A. M., Tuesday, July 9, by Vice-President W. C. Martindale.

The following directors responded to roll-call.

Board of Education, Nashville, Tenn.; Nicholas Murray Butler, New York; Oscar T. Corson, Ohio; Newton C. Doughterty, Illinois; Aaron Gove, Colorado; Albert G. Lane, Illinois; E. Oram Lyte, Pennsylvania; W. F. Phelps, Minnesota; Charles R. Skinner, New York; Wilbur F. Gordy, Connecticut; Augustus S. Downing, New York; H. Brewster Willis, New Jersey; George H. Stout, Pennsylvania; H. M. Johnson, District of Columbia; W. H. Bartholomew, Kentucky; M. L. Brittain, Georgia; John W. Abercrombie, Alabama; Charles D. McIver, North Carolina; W. N. Sheats, Florida; David R. Boyd, Oklahoma; George B. Cook, Arkansas; J. M. H. Frederick, Ohio; T. A. Mott, Indiana; Alfred Bayliss, Illinois; D. W. Springer, Michigan; Charles M. Jordan, Minnesota; Frank R. Dyer, Kansas; H. S. Philips, Colorado; F. Yale Adams, Arizona; W. J. Kerr, Utah; James A. Foshay, California; Irwin Shepard, Minnesota.

Thirty-two members present.

N. C. Dougherty moved that the minutes of the last meeting held in Detroit, Mich., be approved as printed in the volume of *Proceedings*. Carried.

Director Butler offered the following resolution, which was unanimously adopted by a rising vote:

Resolved, That the directors of the National Educational Association tender this expression of their affectionate sympathy with the President in his illness, and hope that his recovery may be so rapid that he may yet occupy the chair at the meeting which he has so successfully organized.

Secretary Shepard read communications from absent members of the board as follows:

Director Charles H. Sherman, of Washington, resigns and nominates Superintendent F. B. Cooper, of Seattle, Wash., for election to fill the vacancy; Director James E. Klock, of New Hampshire, resigns and nominates Professor C. L. Wallace, of Lisbon, N. H.; Director J. M. Fendley, of Texas, resigns and nominates Charles T. Alexander, of Waco, Tex.; Director W. T. Carrington, of Missouri, resigns and nominates Ben T. Blewett, of St. Louis, Mo.; Director Warren Easton, of Louisiana, resigns and nominates Nicholas L. A. Bauer, of New Orleans, La.; Director C. G. Pearse resigns and nominates E. J. Bodwell, of Omaha, Neb.

Director Springer, of Michigan, moved that the resignation of the absent directors be accepted and that the respective nominees be elected to fill the vacancies. Director Corson, of Ohio, seconded Director Springer's motion.

After discussion, in which attention was called to the constitutional provision for filling vacancies in the Board of Directors and to the desirability of filling the present vacancies in order that the meetings of active members might not be without presiding officers, the motion of Director Springer was adopted without dissent.

Letters of resignation by other directors were read, but as no nominations of successors were made no action was taken.

The annual report of the Treasurer of the Association was presented by Charles H. Keyes, Treasurer, Hartford, Conn.

After brief discussion and explanations by Treasurer Keyes, a motion was made and carried that the report be adopted and printed in the annual report.

The annual report of the Board of Trustees was made by Chairman A. G. Lane, of Chicago.

After certain explanations by the chairman, the report was received and adopted, and ordered printed in the annual volume of *Proceedings*.

Under miscellaneous business, the application of the American Society of Religious Education for admission to affiliated relations with the National Educational Association, which was laid on the table for one year at the meeting of the Board of Directors held in July, 1901, was taken from the table for consideration.

After brief discussion, on motion, the application was tabled without any time being designated for its further consideration.

A communication from the Department of the Deaf, Blind, and Feeble-Minded was read, asking for a change in the name of the department to that of the Department of Special Education.

Dr. Alexander Graham Bell, president of the department, being present, was invited to present the reasons for the desired change.

After discussion, a motion prevailed changing the name of the department, in accordance with the application, to the Department of Special Education.

A communication from the officers of the Association for securing the adoption by Congress of a bill for cheap library postal rates was referred to the Committee on Resolutions.

A communication was read from the chairman of the Standing Committee on Entrance Requirements of the Society for the Promotion of Engineering Education, reporting the action of the society at its recent meeting at Pittsburg, Pa., appointing a Committee of Conference with the National Educational Association on formulation of entrance requirements, and asking that a corresponding committee be appointed by that body.

On motion of Director Butler, of New York, this application was referred to the Department of Higher Education for consideration, with the suggestion that such a committee be appointed and that report of the action of the department be made to the new Board of Directors for concurrent approval.

There being no further business, the board adjourned *sine die*.

IRWIN SHEPARD, *Secretary*.

MINUTES OF THE MEETING OF THE NEW BOARD OF DIRECTORS FOR 1902–1903

MINNEAPOLIS, MINN.—JULY 10, 1902

The meeting of the newly elected Board of Directors was held in the Minneapolis Whist Club Parlors, Andrus Building, at 4:30 P. M., with Second Vice-President O. T. Bright, of Illinois, in the chair.

The following directors responded to the roll-call:

Nicholas Murray Butler, New York; Oscar T. Corson, Ohio; Newton C. Dougherty, Illinois; J. M. Greenwood, Missouri; W. T. Harris, District of Columbia; Albert G. Lane, Illinois; E. Oram Lyte, Pennsylvania; Joshua Pike, Illinois; Charles R. Skinner; New York; E. E. White, Ohio; J. W. Abercrombie, Alabama; F. Yale Adams, Arizona; George B. Cook, Arkansas; H. S. Philips, Colorado; Charles H. Keyes, Connecticut; George W. Twitmyer, Delaware; W. N. Sheats, Florida; Miss Catharine Goggin, Illinois; T. A. Mott, Indiana; John D. Benedict, Indian Territory; A. V. Storm, Iowa; John S. Locke, Maine; M. Bates Stephens, Maryland; D. W. Springer, Michigan; Charles M. Jordan, Minnesota; Edwin J. Bodwell, Nebraska; H. Brewster Willis, New Jersey; Augustus S. Downing, New York; W. E. Hoover, North Dakota; J. K. Baxter, Ohio; J. W. Lansinger, Pennsylvania; H. S. Tarbell, Rhode Island; W. J. Kerr, Utah; F. B. Cooper, Washington; M. M. Ross, West Virginia; Irwin Shepard, Minnesota.

Present, thirty-six members.

The following committee on nomination of members of the Council was appointed by the chair:

J. M. Greenwood, of Missouri.
Charles R. Skinner, of New York.
Oscar T. Corson, of Ohio.

On motion, the Secretary was instructed to cast the ballot of the members present for the election of Director Nicholas Murray Butler, of New York, to succeed himself as member of the Board of Trustees for the term of four years. The ballot was so cast, and Director Butler was declared duly elected.

Dr. W. T. Harris, United States Commissioner of Education, was duly elected to succeed himself as a member of the Executive Committee for the period of one year.

Under a call of the roll of states Dr. A. E. Winship, of Boston, Mass., presented an invitation from the school and municipal authorities of Boston to hold the forty-second annual convention in that city in July, 1903.

This invitation was supported by letters read by the Secretary from President Charles W. Eliot of Harvard University and from Hon. Patrick A. Collins, mayor of Boston, on behalf of the common council of that city, giving assurances of a cordial welcome and of abundant facilities for the meetings of the general sessions and of the various departments of the Association.

When under the call of states Washington was reached, Superintendent F. B. Cooper, of Seattle, director for Washington, extended in behalf of the states of Oregon and Washington an invitation to the Association to meet on the north Pacific coast in 1903 or in any subsequent year when the interests of the Association should so direct. Director Cooper disclaimed any intention of entering into competition with the city of Boston for the meeting of the Association for 1903. He also desired to be understood as naming no particular city, but as representing all cities in the two states mentioned as joining in the invitation with a view of leaving the selection of location to the Executive Committee after an inspection of the facilities offered by each locality.

No other invitations being presented, a motion was made by Director A. V. Storm, of Iowa, that the selection of the next place of meeting be left to the Executive Committee with full power to act. Seconded.

After discussion, in which the grounds of the policy of intrusting the Executive Committee with the selection of place of meeting were fully reviewed, the motion of Director Storm was carried.

On motion of Director Gove, of Colorado, seconded by Director Springer, of Michigan, the members of the Board of Directors present unanimously expressed, by a rising vote, their preference to meet in the city of Boston, providing all conditions should be found satisfactory to the Executive Committee.

The committee on nomination of members for the National Council reported as follows:

To the Board of Directors of the National Educational Association:

Your Committee nominate the following as members of the National Council:
Charles F. Thwing, of Ohio, to succeed himself; term to expire in 1908.
Albert G. Lane, of Illinois, to succeed himself; term to expire in 1908.
Edwin A. Alderman, of Louisana, to succeed himself; term to expire in 1908.
Charles M. Jordan, of Minnesota, to succeed himself; term to expire in 1908.
Jesse F. Millspaugh, of Minnesota, to succeed himself; term to expire in 1908.
Robert E. Denfeld, of Minnesota, to succeed Oscar H. Cooper; term to expire in 1906.

On motion of Director Springer, of Michigan, the report of the Committee on Nominations was accepted, and the secretary was instructed to cast the ballot for the nominees. The ballot was so cast, and the nominees were declared duly elected.

Miss M. E. Ahern, secretary of the Library Department, appeared by consent before the board to present a communication from that department, and spoke in substance as follows: "The Library Department desires to call the attention of the Board of Directors of the National Educational Association to the rapid increase of rural school libraries, especially in the middle West. The states in other sections are following closely in this movement. The unfortunate feature of this promising movement is that the rural-school teachers are not prepared by training or experience to care for or to use these libraries to greatest advantage. The matter was discussed by the American Library Association at its recent meeting in June, and a proposition was made that the American Library Association would secure the preparation of a working library manual for special use of rural-school teachers if the National Educational Association would co-operate to the extent of printing and distributing the same.

"Mr. J. C. Dana, chairman of the Committee on the Relations of Libraries to Public Schools, whose report was made under the auspices of the National Educational Association at the Los Angeles meeting, is chairman of the committee of the American Library Association having this matter in charge. The Library Department of the National Educational Association at its meeting this afternoon unanimously supported the proposition of the American Library Association, and authorized me, as its secretary, to appear before you and present the proposition in question.

"I desire also to present a request from the Library Department for a larger appropriation for the annual expense of the department than the sum of $25 now allowed. The peculiar nature of the work of this department demands of its officers special efforts and special expenditures in order to secure conditions for a successful meeting each year."

After an informal discussion of Miss Ahern's request in behalf of the Library Department for an increased appropriation for annual expenses, Director A. G. Lane, of Illinois, offered the following motion: "That the Library Department be requested to present a written application to the Board of Directors for such increase in the annual appropriation as may be deemed necessary, and that the matter be referred to the National Council for consideration and recommendation." Seconded and carried.

Regarding the proposition of the American Library Association for the preparation of a manual for rural-school teachers on condition that it be printed and distributed by the National Educational Association, Secretary Shepard called attention to the fact that

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Under a call of the roll of states Dr. A. E. Winship, of Boston, Mass., presented an invitation from the school and municipal authorities of Boston to hold the forty-second annual convention in that city in July, 1903.

This invitation was supported by letters read by the Secretary from President Charles W. Eliot of Harvard University and from Hon. Patrick A. Collins, mayor of Boston, on behalf of the common council of that city, giving assurances of a cordial welcome and of abundant facilities for the meetings of the general sessions and of the various departments of the Association.

When under the call of states Washington was reached, Superintendent F. B. Cooper, of Seattle, director for Washington, extended in behalf of the states of Oregon and Washington an invitation to the Association to meet on the north Pacific coast in 1903 or in any subsequent year when the interests of the Association should so direct. Director Cooper disclaimed any intention of entering into competition with the city of Boston for the meeting of the Association for 1903. He also desired to be understood as naming no particular city, but as representing all cities in the two states mentioned as joining in the invitation with a view of leaving the selection of location to the Executive Committee after an inspection of the facilities offered by each locality.

No other invitations being presented, a motion was made by Director A. V. Storm, of Iowa, that the selection of the next place of meeting be left to the Executive Committee with full power to act. Seconded.

After discussion, in which the grounds of the policy of intrusting the Executive Committee with the selection of place of meeting were fully reviewed, the motion of Director Storm was carried.

On motion of Director Gove, of Colorado, seconded by Director Springer, of Michigan, the members of the Board of Directors present unanimously expressed, by a rising vote, their preference to meet in the city of Boston, providing all conditions should be found satisfactory to the Executive Committee.

The committee on nomination of members for the National Council reported as follows:

To the Board of Directors of the National Educational Association:

Your Committee nominate the following as members of the National Council:
Charles F. Thwing, of Ohio, to succeed himself; term to expire in 1908.
Albert G. Lane, of Illinois, to succeed himself; term to expire in 1908.
Edwin A. Alderman, of Louisana, to succeed himself; term to expire in 1908.
Charles M. Jordan, of Minnesota, to succeed himself; term to expire in 1908.
Jesse F. Millspaugh, of Minnesota, to succeed himself; term to expire in 1908.
Robert E. Denfeld, of Minnesota, to succeed Oscar H. Cooper; term to expire in 1906.

On motion of Director Springer, of Michigan, the report of the Committee on Nominations was accepted, and the secretary was instructed to cast the ballot for the nominees. The ballot was so cast, and the nominees were declared duly elected.

Miss M. E. Ahern, secretary of the Library Department, appeared by consent before the board to present a communication from that department, and spoke in substance as follows: "The Library Department desires to call the attention of the Board of Directors of the National Educational Association to the rapid increase of rural school libraries, especially in the middle West. The states in other sections are following closely in this movement. The unfortunate feature of this promising movement is that the rural-school teachers are not prepared by training or experience to care for or to use these libraries to greatest advantage. The matter was discussed by the American Library Association at its recent meeting in June, and a proposition was made that the American Library Association would secure the preparation of a working library manual for special use of rural-school teachers if the National Educational Association would co-operate to the extent of printing and distributing the same.

"Mr. J. C. Dana, chairman of the Committee on the Relations of Libraries to Public Schools, whose report was made under the auspices of the National Educational Association at the Los Angeles meeting, is chairman of the committee of the American Library Association having this matter in charge. The Library Department of the National Educational Association at its meeting this afternoon unanimously supported the proposition of the American Library Association, and authorized me, as its secretary, to appear before you and present the proposition in question.

"I desire also to present a request from the Library Department for a larger appropriation for the annual expense of the department than the sum of $25 now allowed. The peculiar nature of the work of this department demands of its officers special efforts and special expenditures in order to secure conditions for a successful meeting each year."

After an informal discussion of Miss Ahern's request in behalf of the Library Department for an increased appropriation for annual expenses, Director A. G. Lane, of Illinois, offered the following motion: "That the Library Department be requested to present a written application to the Board of Directors for such increase in the annual appropriation as may be deemed necessary, and that the matter be referred to the National Council for consideration and recommendation." Seconded and carried.

Regarding the proposition of the American Library Association for the preparation of a manual for rural-school teachers on condition that it be printed and distributed by the National Educational Association, Secretary Shepard called attention to the fact that the Committee on the Relations of Public Libraries to Public Schools, of which Mr. J. C. Dana was chairman, expended only a small proportion of the amount appropiated for the expenses of the committee — $171.50 of the $500 appropriated — and that there remained an unexpended balance to the credit of the committee.

On motion, the application for co-operation with the American Library Association in the preparation and distribution of a working library manual for rural-school teachers was approved and referred to the Executive Committee, with power to act within the limits of the unexpended balance of the Committee on the Relations of Public Libraries to Public Schools.

Director James M. Greenwood, of Missouri, chairman of the Special Committee on Investigations and Appropriations of the National Council, reported that action had been taken by the Council creating a special committee of nine (afterward enlarged to twelve) on the subject of "Taxation as Related to Public Education," to report to the Council not later than 1904, unless otherwise directed by that body; and that the Council recommend that the sum of $1000, or so much thereof as may be necessary, be appropriated for the clerical and other expenses of the committee in the preparation of the proposed report.

An informal discussion followed as to the desirability of such an investigation, and as to the ground to be covered by the proposed report.

On motion, the recommendation of the Council was concurred in, and the sum of $1,000 was appropriated for the expenses of the committee.

On motion of Director T. A. Mott, of Indiana, the sum of $750, or so much as may be necessary, was appropriated for the meeting of the Department of Superintendence for 1903.

On motion of Director A. V. Storm, of Iowa, seconded by Director D. W. Springer, of Michigan, the Executive Committee was requested to authorize the publication in the annual volume of *Proceedings* of the presidential address of President William M. Beardshear, which was not delivered on account of the illness of the President.

There being no more business, the meeting adjourned.

IRWIN SHEPARD, *Secretary.*

GENERAL SESSIONS OF THE ASSOCIATION

ADDRESSES OF WELCOME

HON. S. R. VAN SANT, GOVERNOR OF MINNESOTA

[STENOGRAPHIC REPORT]

Mr. Chairman, Ladies and Gentlemen:

It is a pleasure to meet you, to greet you, and to welcome you to our state. Indeed, we honor ourselves in doing this.

It is customary on occasions like this to speak of our educational institutions. I would first mention the fact that Minnesota has an institution in her great university that we all are proud of; and, while proud of that, we are still prouder of the splendid educator, President Cyrus Northrop, who is at the head of it, and who will later address you. If this institution does not at this time excel any other in the United States, remember that it is young; not more than fifty years ago, where its magnificent buildings now stand was to be found the tepee of the Indian. Harvard and Yale were old when our university was established, but it now has 3,700 students. It is not only large in numbers, but it is most excellent in its scholarship. This great institution, with all its faculty and students, extends to you a most hearty welcome.

We live in a progressive age, and our colleges should teach their students, not only to know something, but to be able to do something. So we have as a part of our great university an agricultural college which is doing most excellent work, and, in my judgment, has done as much to develop Minnesota as any other institution in the state. Our high schools are unexcelled, and our superintendent of public instruction is very properly giving careful attention to our rural schools, for it is in the latter that 80 per cent. of our children receive all the education they ever obtain to prepare them for citizenship. All these, with our eleven thousand or more teachers and our five hundred thousand pupils, bid you welcome.

The fathers of Minnesota were wise in their day and generation. They commenced early to provide for the future, and as a result of their foresight we have a permanent school fund of $15,000,000. By a wise provision of the law only the interest is available for present needs. Last year some $500,000 was available, and was used for the education of the boys and girls of Minnesota. This is remarkable when you consider the youth of our state. When all the school lands are sold it is expected that we will have the vast sum of $30,000,000 as a permanent school fund. So you will pardon us if we have a just pride in our educational institutions and advantages.

I welcome you also to this great city; it is our metropolis. Here you will find the largest mills in the world, which grind the best wheat into the best flour ever made. If you are not properly entertained in this city you can go out to beautiful Minnetonka and on its sky-tinted waters and pebbly shores enjoy yourselves. If that is not sufficient we have more than seven thousand lakes. If you want a longer trip you can journey to the source of the Mississippi river, which is in our state, and go to the Gulf. And if you desire to travel farther north you can proceed to the Red River of the North and go to Hudson Bay. Should you wish to go east you can make a short journey to Duluth and then go by way of the great lakes. And if you tire of water routes and want to go west you have the choice of two great parallel roads that will carry you to the coast. With all these beautiful surroundings and opportunities for travel we bid you welcome.

But Minneapolis, while it is our metropolis, is not our only great city. I read with pleasure of your meeting at Charleston; they boasted of their beautiful city by the sea and of their commerce. Do you realize that we have a city by the sea? We have the imperial city of Duluth, situated at the most westerly point of the great lakes; its commerce is immense, and for the purpose of boasting somewhat I desire to annex, temporarily, the port of Superior. From and to this harbor in Minnesota more tons of freight were shipped last year than from any other harbor in the United States, even exceeding that of New York, Boston, Baltimore, or San Francisco. This will give you some idea of our great state and its commerce.

Speaking of our mills a moment ago, and the wheat we raise to feed the world: Our farmers, in their wisdom, and greatly aided by our agricultural college and our excellent dairy and food department, have diversified their farming, and Minnesota, while famous as a wheat-growing state, now gives great attention to the dairy industry. We excel in that direction, as is evidenced by the prizes we take for the best butter, made by our seven hundred or more creameries. In fact, we are doing so much along this line, making butter enough to spread all the bread, that we have changed our name from the meaningless "Gopher State" to the "Great Bread and Butter State." With all this bread and butter we welcome you.

We have another city, and that is St. Paul, our capital. I reside there temporarily, and am willing to remain longer if the people so desire. It is a beautiful city, and when you are tired of staying here, come down and we will show you our new capitol, a veritable marble palace. We are building this great capitol, to cost in the neighborhood of $4,000,000, without incurring one dollar of bonded indebtedness. You who come from Massachusetts may feel somewhat lonely; come over to our state treasurer and ask to see how our school fund is secured, and you will find more than $2,500,000 of Massachusetts bonds in our strong-box. Are you from the sunny South—you will find securities you will be familiar with, from the states of Delaware, Virginia, Louisiana, and other of your commonwealths.

I am reminded of another city, peerless and most beautiful. If you are not satisfied here, come to that city which, to my mind, is the most beautiful of all—Winona, sometimes called the "Venice of America." There you will be greeted by one of our greatest men, your friend and my friend, the Secretary of this organization, Professor Shepard. I say one of the greatest, because he is one of the greatest educators in Minnesota.

If I might give you any advice, I would especially urge the teaching of patriotism in our schools. In our country we owe much to the soldier and the teacher; one the patriot, the other the educator. They toiled together from early colonial days. The work of the soldier we know, but the significance of the scholar's mission, unheralded by the blaze and roar of cannon, is usually overlooked. *Poor Richard's Almanac* with its wise sayings was read by more people than Samuel Adams' plea for independence. Noah Webster and his spelling book are as much a part of our country's history as Patrick Henry and his fiery eloquence. Benjamin Franklin with his maxim of economy led the people to be honest and saving, energetic and practical, and laid the foundation in the American character for our great national wealth and prosperity.

Contemporaneous with these were Washington, Jefferson, Hamilton, and a host of other patriots preparing the people for loyal sacrifices in the cause of independence. Determined men "with empires in their brains," who battled with savages and wild beasts on a "bleak and inhospitable coast" counted education as an essential factor in all their plans. They built forts and blockhouses and manned them; they also built Harvard and Yale and endowed them. The teacher and the patriot, the schoolhouse and the flag, how naturally we link these together as we study our country's history!

There is a question that is being much discussed: Does the constitution follow the flag? Let the lawyers and the statesmen settle that, of one thing we are sure, the school-teacher does. We sent soldiers to the Philippines to call the inhabitants to order, then we sent a shipload of teachers whose work will make the presence of the soldier unnecessary.

Our teachers are patriotic. I desire to testify to that fact. As I stand in your presence I recall the school-days prior to the war. I am free to say that no more patriotic body of men and women ever lived than the school-teachers of the early 60's; mine was not an exception; he did not try to restrain the fervor of his pupils. When the time came to go the boys packed up their algebras and Cæsars and lost all interest, for the time being, in mathematical problems, and they were not caring into how many parts Gaul was divided, but they were determined that their own country should not be divided at all.

"Peace hath her victories not less renowned than war," and patriotism of the highest type is absolutely essential to our national existence. Vital questions are to be met. They must be settled properly. In order to do this we must not only educate our people, but teach them to be patriotic. Those who preceded us did their part well. Intelligent patriotism has borne fruit. The labors and examples of our teachers have not been in vain. When the shock of war came we met it like men. When calamities have thrown the nation into the greatest grief there resulted no panic. Lincoln, Garfield, McKinley are stricken down, but the nation still lives. Men rise and fall, but the government, supported by thoughtful and educated patriots, stands firm like a mountain upon its base. More and more we need to join together the cultivated mind and the loyal heart.

I am glad, teachers, to meet you. I envy you your opportunities. Yours is an exalted calling. Into your hands is intrusted the making of the men who will be the voters and the voted-for. Your works follow you. The boys and girls you teach will soon pass out of your thoughts, but they will never forget you. Your influence over them will abide. You can afford to be patient, hopeful, earnest, for in the years to come, if you do well your part, men and women will rise up to bless your memory, and this great government will owe you a debt of gratitude; for as long as patriotism and education march side by side, so long will our country withstand the storms of war and the dangers that threaten in time of peace; for the work of the teacher not only benefits the individual, but the state as well. The hope and safety of the state are in the education of its people. So you should be welcomed and your work appreciated, not only by the governor of the commonwealth, but by everyone who desires its perpetuity.

I therefore bid you welcome, and express the wish that your deliberations may result in great benefit to your splendid organization and that you will carry with you pleasant memories of this beautiful city and this great state.

HON. JOHN W. OLSEN, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, ST. PAUL, MINN.

In behalf of the twelve thousand teachers, twenty thousand school officers, and unnumbered parents and school patrons interested in the welfare of the rising generation, I extend to you a most sincere and hearty welcome to this great commonwealth, so rich in forest, in agricultural, and mineral resources, and having the largest permanent school fund of any northern state — a state wherein every child, if properly prepared, may enter any public high school, free of tuition; a state which, in addition to its regular distribution of public-school funds, generously encourages efficiency thruout her public schools by paying annually $1,000 to every high school, $400 to every graded school, $200 to every village school of two departments or more, and $100 to every common country school reaching a prescribed standard of excellence.

During the last twelve years, inspired by your presence here in 1890, our teachers have done a noble work. They have enrolled thousands of boys and girls as Scandinavians, Germans, Bohemians, and other foreigners, but after contact with our public schools they became Americans saluting only one emblem, and that, in the language of a neighbor, "the most sacred the sun shines upon except the cross of Christ." I refer to the stars and stripes, representing the best in manhood, government, and education.

Great and stupendous questions, social, economic, and international, are pressing upon this nation for solution; the hand of the Almighty seems to have forced us to the very center of the world's stage. While we do not impress the best brain and brawn of our young manhood in this country into involuntary military servitude to maintain our present institutions or give trend to the future, while the only direct means of self-preservation employed by the state and nation is the public school, I am not apprehensive as to the future. When thousands of the most severely trained, most highly cultured, most conscientious, sympathetic, and altruistic men and women in our land give so freely of their time, money, and effort as to meet here from every state and territory in the union in behalf of to-morrow's manhood and womanhood, then, indeed, there can be but one answer to every question confronting us, and that ultimately the right answer.

I do not presume to say what the final policy of this government shall be in relation to the Phillipine Islands, but this much I dare say, that the question will be solved rightly; that by virtue of your teaching, regardless of whether the Republican, the Democratic, or any other political party shall prevail, the patriotic heart of the American people will never again permit either Spain or any other effete monarchy to build about those islands of the sea an imperial breakwater against the American idea of civil and religious liberty.

We bid you a most hearty welcome, for by seeing and hearing you, our distinguished leaders in education, and apprehending somewhat at least of your broad, deep, chastened, and mature thought, the purity of your motive, the vastness of your conception, the ideals and theories of your method, we expect to gain inspiration to climb to those higher rounds of life's ladder to which you beckon us, where our intellectual horizons will be broadened, where we shall live above the fogs and miasmas of selfishness, narrowness, and bigotry in life; where we may see our duty in relation to humanity in more accurate perspective; where we in turn can beckon those under our charge to "come up" and do not have to command them to "go up."

I trust that you may enjoy to the fullest extent the charms of nature surrounding our northwestern metropolis and the open hospitality of our homes, and that you may here have a convention, the far-reaching effects of which only infinity can measure in making for a most exalted manhood and womanhood which, in the language of that foremost teacher, Horace Mann, "dare track the very Deity in His ways of wisdom."

HON. D. P. JONES, PRESIDENT OF CITY COUNCIL, MINNEAPOLIS

[STENOGRAPHIC REPORT]

It is a distinguished honor to stand in the presence of this vast audience this afternoon and to represent the city of Minneapolis. It is more than a distinguished honor to address the National Educational Association of the United States. Let me remind you that it is also a very distinguished honor to stand upon this platform and to speak in this great audience room because not many years ago upon this platform stood that peerless statesman and man, William McKinley, presiding with his courteous dignity over the deliberations of the great national republican convention which presented to the people of this country, yes, to the world, the name of Benjamin Harrison as a candidate for the highest office in the gift of the American people.

But let us see, as I am to speak for Minneapolis today and for her citizens who give you welcome, where Minneapolis has come from and what marvel it is that a half million people are located within a very short distance of the place where we now meet.

Looking back just a moment at the history of this most important section of the West which we call the Northwest, let me remind you that only a few hundred years ago this great domain of the Mississippi valley was under the flag of Spain. Then, later, came from the St. Lawrence valley the French voyageur and discoverer. He laid claim also to this mighty territory and contended with Spain for the mastery. In the front rank of the intrepid band of explorers were the Jesuit fathers, bringing in the one hand the Bible and the crucifix, and in the other the sword, that they might force their way into this coveted territory. France was victorious and planted her standards here, and we have inherited a rich nomenclature from this unique invasion in such names as Nicollet and Hennepin, Marquette, and, greatest of all, LaSalle, who presented this vast territory to France and named it Louisiana. We are on the ground of what was once known as Louisiana and from which proud area have been carved great states and territories. But France was not to hold undisputed sway in this region, because the Anglo-Saxon came across the Atlantic and saw with covetous eye this vast empire; and it was reserved providentially for the Anglo-Saxon to occupy this land which we now inhabit. It is not more than two generations since the Indian stood where we stand today and saw that realistic picture of beauty, the Falls of St. Anthony, and thought it was to be his home forever. But it was not so ordained, because the Anglo-Saxon had come; the hardy pioneers from New England, from Maine, New Hampshire, Vermont, and Connecticut and from the intervening territory had come, and now, within the space of two generations, we find a city with a quarter of a million inhabitants.

I think it is always permissible for a loyal Minneapolitan to say some things about his city and her citizens; and assuming that you will permit this, let me say that it is with great pleasure we welcome you to this city. We think it is beautiful; we love it because we live here, and we live for it. We have things to show you of which we are proud. We have our great industries, we have our homes, we have fine hospitals and homes for the needy and the orphan and the aged, we have our schools and our art schools, and we are proud of them; we have our beautiful park system with its boulevards and drives, and we want you to enjoy them, and we have the father of the park system, Hon. C. M. Loring, today with us upon this platform, and I would offer a word in his honor. It is a greater thing to be the father of the park system of a great city than it is to command millions or to hold the highest office in the gift of a city. We have a superb educational system, we have our public schools with their forty thousand school children. We contribute for education three-quarters of a million dollars by taxation annually. Our state educational system is represented by our state university within our own borders, with its nearly four thousand students, and we have not only the state university, but we have President Northrop, and that is far better. And as an alumnus of the institution I wish to say that no man in the state of Minnesota more fully deserves the love and esteem of our people than does President Northrop.

A word of welcome should be short. We want to present to you all these beauties, and we want you to enjoy them to the fullest extent. We want you to know us all, and the words of wisdom you shall utter in our hearing will remain with us as a precious heritage.

Of all the great conventions (and we are called a convention city) that have assembled here, none has honored us more than this great educational Association. We thank you for coming; we have long waited for you. Our house is in order, it is garnished and swept, we extend to you hands of cordial welcome. Stay as long as you can, and, when you go, may you go in peace.

DR. CHARLES M. JORDAN, SUPERINTENDENT CITY SCHOOLS, MINNEAPOLIS

Ladies and Gentlemen, Members of the National Educational Association:

For three days I have been busy welcoming the members of this body, and now I am called upon to do it all over again. This, however, has its compensations. I feel like the man who said he liked the Episcopal church because it gave him a chance to talk back. From the variety of the welcome given you I take it that, like the poor, you will always be with us. You have been welcomed by the governor of the state on behalf of its citizens, for the governor, however much he may disbelieve in railroad mergers, believes in all such mergers as this. You have been welcomed by the state superintendent of public instruction on behalf of all the teachers of the state, and one of those teachers I am. Then you have been welcomed by a representative of the city council, acting for our mayor, who has told you all about the beauties and glories of Minneapolis, and who intended to offer you its freedom; but so many people have lately been taking advantage of its freedom that we have withdrawn the offer.

And now it is my pleasure and privilege to welcome you on behalf of the nine hundred teachers of Minneapolis who never talk back to anybody except their superintendent. I welcome you here for a great many reasons. In the first place, we are glad you are here because we invited you to come, and Minneapolis, like other society ladies, resents the declination of an invitation. We are glad also to have you here because of what you are and what you represent.

The citizens of this city have come from every quarter of the globe. There is not a country that has not its representation in the citizenship of Minneapolis, and yet there is one thing upon which they agree, and that is that no violent hand shall be laid upon the interests of the public-school system.

We welcome you also because this Association represents the interests of the common-school system of this country. Composed as it is of distinguished presidents of great universities, of professors of universities, of so many who are interested in higher education, yet it stands, and always has stood and always will stand, for the interests of the common-school system of this country. For we must remember this, that the fundamental principle upon which public education rests is the principle of a common-school education for every boy and girl in this country. Believe as much as we may, and as much as we do, in our universities and our high schools, yet nothing should stand in the way of giving to every boy and girl, no matter how poor or how humble, the very best opportunities possible for an education. If the time ever comes that our public-school system drifts away from that purpose, if the time ever comes that the aristocracy of this country gets hold of the public-school system, then it will be swept out of existence by an enraged people.

I did intend to brag a little about Minneapolis, but after I heard these two politicians and this real-estate man speak of it I simply hung my head. There is not a school-teacher, not one, who can boom things as they can, and yet I must say that we are proud of Minneapolis even now. The great glory of a city, as cities go now, is to clear out rottenness wherever it is found.

There are those here in this hall today who were in Minneapolis twenty-seven years ago when this Association held its meeting here. They know what Minneapolis was at that time, a little struggling hamlet. Now we have a splendid city, and yet the first little house that was built on this side of the river is standing now in one of our public parks as a memorial of our wonderful growth. But Minneapolis, you know, is not only a place, but Minneapolis, like Boston, is a state of mind. Minneapolis is made up of men and women who earn their own living, own their own homes, take care of their children, and gladly and heartily entertain their guests. It is a pleasure to me to welcome you here with us. When it was decided that this convention was to come here every teacher in the Minneapolis schools but fifteen indicated within one week a desire to become members of this body, and before the week was over the other fifteen had come forward and paid their dues. St. Paul gave us its hearty support, the cities and towns surrounding us were all loyal, and we secured 125 more memberships than were asked for by the committee which came here to select the place for holding the convention. And so you can see that while your entertainment may not be what you expected or wished, it is all we know how to give. If there are mistakes they have been mistakes of the head and not of the heart.

Again I welcome you, and again I express the hope that, when you leave us, you will have the opinion which all Minneapolis people have, and which all sensible people in this part of the country have, that Minneapolis is the best city on earth.

DR. CYRUS NORTHROP, PRESIDENT UNIVERSITY OF MINNESOTA, MINNEAPOLIS

Ladies and Gentlemen:

I was very much comforted by one of the petitions embraced in the prayer of my brother Hallock; he prayed for those who were to speak this afternoon "from the governor down," and you will readily see where my interest in that prayer came in. If the man who rises on a hot afternoon to make the fifth speech of welcome is not "down," I don't know when he will be. I have always felt that this welcoming business was overdone, and I am quite as much impressed with this feeling this afternoon as ever before. I sweltered thru a hot afternoon in Detroit last year listening to addresses of welcome, and I proposed before another meeting to have a revision of the custom. Here it is again, and what is worse in my part of it, I don't know, ladies and gentlemen, of anything to welcome you to in particular, because there is nothing left. Everybody has said all that human eloquence, human intellect, and human imagination can suggest; but, as I am a man of veracity, I shall not try to imitate those who have preceded me. But I want to tell you in confidence—and I think I have secured your confidence now, so you will accept what I may say without a grain of allowance—we have here a most delightful climate; the skies are never bluer anywhere within the limits of this great republic than they are in Minnesota—when you can see them. I do not know what the matter is with the earth in general at the present time, in this country in particular, but I suspect the trouble may all be laid to the act of Congress in providing for irrigation. There was a distinguished gentleman who used to live in New York (he died a few weeks ago) who wielded a very sharp pen, and he had that most undesirable faculty, an ability to pile up a series of indictments against this country because things were as they are, and he would close his indictment by saying that these things were all due to the tariff; and so I think this excessive amount of irrigation that is going on from east to west must be due to the act of the late Congress, for I have just come from New England, and it was worse there than here. They had not only the rain, but they had that peculiar New England temperature we never have; our climate is so remarkably dry. As you go west the climate is a great deal drier; the Minneapolis people have the loveliest climate, and the rich spend the summer at Lake Minnetonka to avoid the heat of the city, and in the winter they go to California or Florida to avoid the cold, and those of us who remain here are the vigorous ones. A great climate Minnesota has! We should like to have this beautiful assembly stay with us always.

I want to leave one idea with you before I close. We have a large country, this United States of America, and, as I mention it, I am sure there is not one in this great assembly who is not thrilled with a new sense of the glory of our country at the present moment. I think we have never been so proud of it as we are today. What we have done for Cuba stands before the world as the one great example of national altruistic self-abnegation and love of humanity. No act in all the history of the world stands beside it, and no act that any nation has ever performed is so well fitted to bring honor to the nation that did it as this act; for he who takes to himself everything does it in selfishness, and the nation which takes everything to herself does it in selfishness. "He who loses his life shall save it," and the nation which gives up life and treasure for others is the nation that shall go down the ages marked in the brightest colors of history and an example to the whole world.

Now such is our nation today, glorious, and yet here in this country are millions of people who have come to us in the maturity of their years, with their habits fixed, with their own associations and tastes; they are scattered all over the country, they are here in hundreds and thousands, they are in every part of the country except the South—there they are not found to such a great degree, but the South has its own problem. The great problem for us everywhere is the assimilation of these people: not that we should be all alike, but that we should know one another, that we should understand each other's peculiarities, that we should be acquainted with each other's good qualities, that we should comprehend one another's ideas, and tho the nation be so large that a dozen or twenty countries might be carved out of it, and each one should have its own peculiar characteristics and customs, apart and in many respects distinct nations, yet we should all know each other; we should all understand each other; in the great central aspirations of the heart we should be one. Ladies and gentlemen, nothing tends to this so much as the annual meeting of this great Association, gathering together in one place the teachers of the children, the educators of the country, the leaders of thought in every part of our land, and causing them to become acquainted one with the other, and more than that, with the teaching and customs of the various parts of our country.

Who is there that can go to the South, to that beautiful city of New Orleans, and see Tulane University and live there and stay with the people, and not feel a love for the South?

Who is there that can go to the Pacific, to the University of California, and look out on the Pacific, and not feel that California is no longer what it was in 1849, a questionable factor, but is one of the great elements of this great republic.

Who can go to New England and visit Harvard and Yale and not feel that the cradle of liberty of this great country is still being rocked and rocked successfully?

Who can go to the great center of this country and see the vast industries, producing millions upon millions of dollars, making this nation the base of supply for the whole world, without feeling that we are united — one and inseparable in our interests, purposes, and aspirations—and that there is in the future of this great republic something beyond all we have seen or imagined or conceived, the high position of leader in thought, leader in education, leader in production, leader in policy, leader in the dominion of the world, leader of nations.

This is what I feel in an assembly like this. The value of the occasion is not in the words I can utter to you, it is not in the learned papers that will be read to you, it is not in the lessons in pedagogy that someone will teach to you, it is in the coming together of the North and the South, the East and the West, the clasping of hands, the feeling that we are one in this great republic.

RESPONSES

JAMES A. FOSHAY, SUPERINTENDENT OF CITY SCHOOLS, LOS ANGELES, CAL.

Mr. Chairman, Ladies and Gentlemen:

To you, sirs, who have so eloquently given us cordial welcome to your state, your city, and your homes, it gives me great pleasure to express our thanks. I am proud to respond to these words of welcome in the name of the great western division of our National Educational Association. Of the divisions of this Association, ours covers by far the greatest area; but no one depends upon us to furnish educators in proportion to our area. You may be surprised, however, when I tell you that the western division now furnishes 23 per cent. of your members, exclusive of those in Alaska and the Philippines.

As an index of the educational interest of California, one state of the western division, I would have you note that, while her population is less than the city of Chicago, yet, since the great meeting of this wonderful Association at Madison, in 1884, California has furnished more memberships than any other state or territory, except the state of Illinois.

Your beautiful city lies in the heart of the golden grain country. It delights our eyes to ride thru its opulent acres, and our ears to hear the tales you can tell us about it. It would not be well for me to quote the statistics that I am longing to fling forth. You know that in 1871 you received only two carloads of wheat here, and in 1901 you handled—but I dare not mention the number of millions of bushels. I am a Californian; I have had practice in believing things—we have statistics ourselves in California—but you know what these down-easters will say if I merely tell them the bald truth about your millions. And of what use is it to attempt to tell the truth—a truth that will not stand still long enough to be caught? You have contracted such a habit of racing away from figures, even while one tells them, with the unlimited resources of this rich country that lies all about you, that the unbelievable wealth will soon be trebled and quadrupled; I will not commit myself to figures that you may already have discounted while they are forming on my lips.

For your eastern visitors and your western alike, there is a pleasure and a brotherly pride in the contemplation of this golden flow of riches. Another source of your wealth, however, gives a Californian great anxiety. In our land, we worship trees. It used to be said of us that we bought water and a tree, and then had a few acres of land thrown in for good measure. You have cut into your forests with the lavish hand of one who rejoices in his abundance and need not be niggardly, and we look with admiration on your plethoric resources; and yet, with a fear engendered in the unbroken sunshine of our own landscapes, we hope that you will not fail to enforce adequate laws to keep your land of primeval forests forever from becoming a shadowless country.

Your grain, your lumber, and your many factories would seem to make of you a wholly practical, money-making people; but, on the other hand, your homes, your parks, and the beautiful lakes that grace your neighborhood, mark you as a home-loving, beauty-loving people. Over all is thrown the glamour of your Indian legends, which captivate the Californian's heart. To bind us to you irrevocably, we read in your history that you, too, are '49-ers. The same year sent your forefathers and ours pioneering into a new land. One half century has witnessed our growing up and yours, pace for pace.

That you, and we, and all our common country, while we have been growing in wealth and material comforts and influence among the nations of the world, have also been ever watchful of another and most important phase of our growth, this assemblage is the proof. To the problems of education our whole country is anxious to give its best thoughts and efforts. What great promise of uplift for us all is in this spectacle—earnest men and women from all the states of the Union, representative of the best thought and ripest experience of every section, coming here to counsel together for a few fruitful days upon this vitally important theme.

In the cities, towns, villages, in every condition of our country's varied life, these teachers have been doing noble work, day by day. Now, the year lying behind us, we have brought our experiences and the fruits of them together from all directions for our great annual conference. Here we are, to discuss the needs of the new century. How shall we make our youths ready to take up and carry on the work of solving the strange, new problems of science? How give them the taste for scholarly things? How interest them in the great economic questions that are being thrust upon us by the rapid growth of our own country and the struggle between labor and capital in the old country? How caüse them to see that they should understand the underlying principles of political economy and sound finance without learning them thru the bitter school of experience?

All of these things are important, and each has its time of seeming more important than all the others. But since our last meeting the vital importance of one subject has crowded out all the others, or is it that this old, but now startlingly new, subject is only the crystallized, embodied form of all the others? The terrible tragedy that took from us a beloved president has impressed upon us that we must try to make good citizens—that is, men and women who will know the laws of their country, and will have the courage to work against the passage of unjust laws, and the ability and honesty to frame just ones. President Roosevelt last Friday emphasized this thought in the following:

> Oh, my fellow-countrymen, as we face these infinitely difficult problems, let us ever keep in mind that tho we need the highest qualities of intellect in order to work out practical schemes for their solution, yet we need a thousand times more what counts for many, many times as much as intellect — we need character. Character, that compound of honesty and courage and common sense, will avail us more in the long run than any brilliancy on the stump, or any adverse legislative means and methods. The brilliancy is good. We need the intellect; we need the best intellect we can get; we need the best intelligence; we need more still — character.

As someone has wisely said, we can execute the anarchist, but that does not affect anarchy. When the anarchist believes that he is benefiting the human race by his act, then his execution becomes to him and his fellows martyrdom, and their cause seems sanctified. It is our duty to strike at the spirit of the movement. Can we not, and must we not, inculcate reverence for the great laws which say: "Thou shalt not kill," and "Thou shalt love thy neighbor as thyself"? And can we not bear in upon young minds that these rules have no exceptions?

And now, fellow-teachers, out of your days for rest and recreation you have eagerly offered this week on the altar of your vocation. We shall enjoy the friendly greetings, the opportunities of renewing those dearest friendships that were formed in days of yore, and learn of the new ideas on education which are to be analyzed and tested.

We know from the words of welcome we have heard that temptations of pleasure will assail us this week from all sides; and already, like Ulysses, we feel the need of being bound to our posts; but still, thru all, we know we are here in the interests of a sacred and solemn calling, and I trust that the labors of this week may be as productive of good to the great cause of education as they must be replete with pleasure to those who participate in them.

THEODORE B. NOSS, PRINCIPAL OF STATE NORMAL SCHOOL, CALIFORNIA, PA.

Mr. President, Ladies and Gentlemen:

The welcome extended by these distinguished gentlemen has been cordial, but not beyond our expectations. By us eastern folks everything is expected to be done in a large and generous way in the West.

We are glad to meet again in your state. Minnesota is a state of magnificent opportunities. Her size is nearly double that of the so-called Empire State, and is equal to six of the average Atlantic states and to sixty of the smallest. Your state is central in the continent of North America, and the streams which flow from your ten thousand lakes reach the Atlantic ocean through Hudson's Bay on the north, the St. Lawrence on the east, and the Gulf of Mexico on the south. These geographical facts are but suggestive of your position and influence in those realms of industry and thought which make a people truly great. In some lines of activity you have distanced all your competitors. Your vast agricultural developments and your mighty industries excite the admiration of the world, and your educational enterprise has kept pace with your material progress. Taken all in all, it seems to me that we find in Minnesota a true type of the best things in American life.

It is well, therefore, that this great army of teachers should meet here. We shall find a tonic in your atmosphere, and shall catch something of your enthusiasm. There are many good things to be gained by holding such a convention here. I will refer to but one, and that is the help that may and should come to the most conservative of all professions from contact with your progressive spirit.

It was a fancy of my youth that for an eastern man to achieve greatness a western experience is necessary. This has been illustrated in the lives of many, and of some here present. Only four days ago I witnessed a scene which I shall not soon forget. Sixty or seventy thousand people covered the hill-slope in Schenley Park, Pittsburg, to hear a man discuss questions of national and international importance. He used no notes, and spoke with great vigor, faultless diction, and with perfect candor and freedom. Who was this man? He is an eastern man with some western experience and a great deal of western progressiveness. He is the youngest man who has ever sat in the presidential chair, and a man whom the republican state convention of Minnesota a few days ago nominated for the presidential chair again in 1904—Theodore Roosevelt.

I am told that your state was settled, and her career determined, by New England Yankees, whose natural caution was out here transmuted into enterprise, whose sagacity became audacity, and who added to their reverence for the old an eager quest for the new. The world knows the result. The cause of education owes a debt to the bold pioneers of the West and Northwest.

No class of workers, whether artists or artisans, have more need of being spurred forward than teachers. The gravities of our calling all tend toward the dead level of conservatism. Spain has been condemned for attempting to force an eighteenth-century civilization upon a twentieth-century people. I fear this mistake is being made continually in the name of education. Our faces are ever turned toward the past. We have memory, but no imagination. If the schoolmasters of the land were left to themselves, I fear they would degenerate.

Mr. President, our emancipation from old methods and trivial aims must come from outside our own calling. Much of the matter that fills our text-books is obsolete in real life. When we convince the teacher that what he teaches, with almost religious zeal, is practically useless, he takes refuge in what he calls "discipline," and there he is impregnable. In any calling, except teaching, discipline consists in doing something worth doing, and doing it well; but the schoolmaster holds fast the traditions of the elders and contends for the faith once delivered to the saints just as it was once delivered to the saints. Thus, the forces of education are well organized for defense, but not for attack or exploration.

Of course, Mr. President, I speak of the tendencies or the gravities of our calling, and not of those educators who fight successfully against these tendencies, nor even of those who fail in the fight. As a class, our faces are set toward the past, and yet it is not the past but the future with which we shall have to deal. The old educational folly continues of putting new wine into old bottles and new cloth on to an old garment. We shackle the forces of education with the worn-out forms and theories of the Middle Ages. We belong to a profession that is more bent upon talking over the fruits of victory than upon risking life or limb to win new victories. It is not much to our taste to blaze a new road thru the forest; we would rather expose the defects of the road after it has been opened by other hands. In short, we don't "cut much of a figure" as pioneers. In the main, we follow custom, and of all despotisms the most inexorable is custom. Were it not for modern British law in India, widows would still be burned by thousands upon the funeral pyres of their husbands. As it is, all girls are required to marry at from ten to twelve years of age, and tens of thousands of these, left widows, many of them less than twelve years of age, are doomed to a life of contempt and misery that is worse than death. When educated Hindus are asked why such practices are continued, their stereotyped reply is "It is our custom." Conservatism holds India and China in much the same condition century after century. National character depends less upon geographical position than upon an attitude of mind toward progress. Japan, in the East, advances; Spain, in the West, retrogrades.

At the close of the Napoleonic wars the kingdom of Prussia was in the depths of weakness and humiliaton, but within the lifetime of one man, say von Moltke or Bismarck, Prussia traveled all the way from Jena to Sedan. Within sixty years, she rose thru common sense in common schools to be one of the first powers of Europe, and to make her soldiers feared and her scholars admired the world over. She abolished illiteracy within two generations. How was all this achieved? By a teachable spirit and a willingness to adopt new methods in elementary education. Much as Bismarck did for Prussia, Pestalozzi, tho not a German, did more.

Now you, in these happy new states of the West, where the sway of custom is less felt, can more easily advance from one stage of progress to another, but with us in the East it is a more serious thing to do something in education that our fathers did not do. We judge every educational method by the standard of long usage. Whatever has been for a long time is right.

But, Mr. President, altho progress may be slow, it is sure. The forces that make for improvement will prevail. Some of you will recall the excellent painting by William Morris Hunt in the Philadelphia Academy of Arts, "The Flight of Night." As a female figure in a chariot bears the light of civilization into the realms of superstition and error, a man-slave, holding in his hand an inverted torch, vainly essays to check the speed of the plunging steeds. The educators who play the rôle of the man-slave in Hunt's picture are those who protest against innovations and fads.

I have yet to know of any educator to whom we owe a lasting debt who, with tongue or pen, ridiculed fads. Opposition to the new is a mark of self-complacency and conceit. Where there is due knowledge of our present limitations and great deficiencies, there is always a hospitable feeling toward any sincere effort to improve. Concerning innovations the advice of Gamaliel is always timely: "Refrain from these men and let them alone, for if this counsel or this work be of men, it will come to naught, but if it be of God, ye cannot overthrow it." Education needs the forward look. The world's great benefactors are those who cherished and pursued their ideals thru the fad stage. It requires more courage to face the ridicule of opinionated conservatives with new truth than to follow a leader into battle. The heroism of Columbus is not shown so much in driving his ships into unknown seas and quelling a mutiny among his sailors as in maintaining before the philosophers of Salamanca that the earth is round. The truest and best things in education are the things once denounced as fads, even by good people. The best work of Pestalozzi, Froebel, Horace Mann, and Colonel Parker was called a fad. The new education, with all such features as the word-method in reading, manual training, laboratory methods in science and literature, child study, etc., was called a fad. When Paul the apostle once visited the church at Ephesus he brought to the church an entirely new idea. He said to the brethren, "Have ye received the Holy Ghost since ye believed?" Their honest and ingenuous reply was, "We have not so much as heard whether there be any Holy Ghost." If some of our present-day educators had been there, they would have replied: "We fear the Holy Ghost is a fad."

In short, all that we now care for or cling to in education was once a fad. Even the three R's, which are now valued far above their deserts, were an innovation and a fad but a century or so ago. The fact is, a fad, like the tail of a tadpole, seems to be a necessary stage in all progress. Every reform that has blessed mankind has had to fight with fad-hunters for its existence. Within the memory of some here present the use of anæsthetics to relieve a patient of agony during a surgical operation was denounced as a sin. Within my own memory the abolition of human slavery was denounced as fanaticism. The business of these fad-hunters, like Herod of old, is to slaughter infant reforms by the wholesale. Sad will be the day when there are no fads. That day will mark the beginning of the end. If the thousands of teachers who assemble here catch something of the progressive spirit that has made the West and Northwest what they are, our meeting will not have been in vain.

In the Boston Public Library I have recently seen for the first time Sargent's great mural painting of "The Prophets." The hall, whose sides and ceiling are to be covered with this work, is perhaps one hundred feet long. The work already done, altho justly celebrated, is but a beginning. It covers merely the end and not more than ten feet of the sides and ceiling. Most of the prophets are dejected and in despair. Three of them, however, Haggai, Zechariah, and Malachi, point hopefully to the wall yet to be painted, where, doubtless, will appear the triumphs of Christianity. In education, as in this masterpiece of art, the best work is yet to be done. Education should be dominated by the future, not by the past. What prophets shall we follow—those who worship the past or those who hail the future?

Gladly and expectantly do we come to Minneapolis for this convention, believing that to breathe your air and see your progress will inspire courage and turn our eyes toward the future into which we must go and for which we should prepare.

PRESIDENT JOSEPH SWAIN, SWARTHMORE COLLEGE, SWARTHMORE, PA.

Out on Puget Sound, looking to the eastward, one sees a beautiful mountain in the form of a cone. Its base is covered with a dark pine forest and its top is wrapped in perennial snow. The people of Seattle call this mountain Mt. Ranier; those of Tacoma, Mt. Tacoma. As one travels about the Sound region one can tell where the person with whom he is talking lives by the name he gives the mountain. By a similar course of reasoning I realize this meeting is held in Minneapolis, not in St. Paul.

I am reminded of a story told of Simon Newcomb. He was attending a wedding. The numerous guests were greeting the bride and groom. The great philosopher stood in a corner of the room, silent. He was asked why he did not greet the newly married pair. In a true scientific spirit he responded: "I have no new facts to communicate." At this stage of the program I am placed in the condition of Mr. Newcomb. I have no new facts to communicate. Following the good example of our Methodist brethren, I vote to say "amen" to the responses which have been so heartily given to the cordial welcome which the National Educational Association has received today in Minneapolis. I am sure also that all the teachers sympathize with the words of George Eliot, "I like to be loved, and I like to be told that I am loved." The teachers like to be welcome, and they like to be told that they are welcome.

The other day, in southern Indiana, I met a successful college graduate, who said to me that he would rather his boy should have a good education and a good character than to have a million dollars. This is an old truth, but it was so evidently the prayer of the father's heart that his boy should be a trained; cultured, good man above everything else, that his way of expressing his thought clung to me. This is the prayer of the fathers and mothers who send their boys and girls to the schools which this Association represents today. The two things above everything else which this Association stands for are training and character.

When Booker T. Washington wishes to lift the colored people from the shackles that bind them, he offers them education. When Rockefeller, Stanford, and Carnegie wish to use their millions for the benefit of the race, they endow colleges and build libraries. When the states in this Mississippi valley wish to make strong the civilization of this new land, they build educational systems extending from the district school to the university. When Cecil Rhodes undertakes to promote the peace of the world and extend and perpetuate the ideas and ideals of his country, he gives millions for the education of young men. A president of a denominational school recently said in a pamphlet addressed to his church, "If you would save the church you must keep up your colleges, for the church needs and must have educated leaders for her work." This one thing upon which church and state and mankind are united is the necessity of education for national and individual development and prosperity.

To intellectual training must be added character. If the stars and stripes of our beloved country shall continue to float over a nation of freemen, to knowledge and power must be added conscience and character. "Character is reiterated choice between good and evil." If day after day, as you come to the parting of the ways between the good and the bad, you choose the good, then you have a good character; if the bad, then you have a bad character. It was Maria Mitchell who said: "If I were sure of the right way, I could find the strength to follow it." This is the essence of character. The beauty of it is that good character can be attained by all. We differ in physical strength. We differ in intellectual power. We differ in spiritual insight. But to seek to know and to do the right is equally open to all.

I will probably not be able to prove this proposition to you, that success or failure is more a question of character than of anything else. It is like the proof of the existence of God. It does not come by a syllogism. When the idea of His existence once takes hold of the mind, whether it comes as an original intuition, a revelation, or like the nebular hypothesis, everything in nature is a witness to its truth; so when you come to a realization of the importance of good character in a truly successful life, you see its illustration in the life of every man and woman whom you admire and love. You can read it in the life of your friends and associates, you can read it in the lives of the greatest men the world has produced. It is confined to no walk of life.

If we should make a list of the most successful men of the world today, certainly Abraham Lincoln would be one. An analysis of his career will show that the greatest element in his success lay in his high character. This is illustrated by an incident which I remember my mother told me when a boy. At a cabinet meeting Mr. Lincoln had read his great document, the Emancipation Proclamation. His cabinet members said: "Mr. President, the time has not come for that document to go out to the American people." But he had made a thoro study of the situation, and it presented itself to him in the light of a duty. He had thought over it day and night, and finally he resolved to do it. Thus, when the objection came up in the cabinet, he said, "I will issue that document, for I promised God I would." Having decided what his duty was, he did it. Force of character was the dominating element in his life.

So, fellow-teachers, as we gather here today from all parts of this great republic, accepting the gracious hospitality of this great state and city, we dedicate ourselves anew to the service of the people of this democratic land, to the end that the rising generation of all classes, rich and poor, weak and strong, may grow in knowledge, in power, and in character.

ADDRESSES

PRESIDENTIAL ADDRESS

THE THREE H'S IN EDUCATION

W. M. BEARDSHEAR, PRESIDENT OF THE NATIONAL EDUCATIONAL ASSOCIATION, AMES, IOWA

The progress of education is akin to the evolution of thought in the history of the art of the Madonnas. The artist first placed the Madonna and the child in the consciousness of the Infinite, as suggested by a background of mist and cloud, thereby sharing largely the magnanimity and limitlessness of early myth, legend, and philosophy. Then came the Madonna as enthroned. The Virgin and the child were placed in the most costly enthronement known to history and to art. In the third period the Madonna is enskied, in which position motherhood and childhood were portrayed upon the limitless expanse of the heavens, environed by beauty of cloud and the profundity of the ethereal depths. Next, the Madonnas were portrayed in the out-of-doors, in some beautiful landscape, garden, or meadow, so that the matchless envelopment of the entire earth, generous and fragrant, formed a background for the expression of motherhood and the innocence of childhood. Finally, the Madonna and child were exhibited in the home, prefiguring the sanctities and dignities, emblematic of the fathomless relations of love. This is a befitting evolution of a noble life for a human being. The infinity and limitlessness of early folklore, the supremacy and royalty arising from the epoch of enthronement of Madonna and child in art, the enskyment of womanhood and childhood, the generous beauty and expanse of meadow and landscape, and the empicturing in the homes of earth the many mansions of heaven preparing thru the master-love of the truth—all these epochal meanings have enwrought, under the magnanimous influences of education, the primer of knowledge with which our youth is fed. By these we are coming to embody Buisson's definition of education in the International Congress of Education, at Chicago, in '93, and harmoniously build up the character of the child, "not by means of the three R's, but rather by means of the three H's—Head, Heart, and Hand—and make him fit for self-government, self-control, self-help: a living, thinking being."

THE H'S VERSUS THE R'S

The celebrated three R's reciprocate the commercial spirit that gave them birth. One trouble with our educational work today is that the three R's appeal more strongly to the average citizen than do the three H's, and a money-value, rather than a soul-value, of education is still dominant in the esteem of the masses. Many of the teaching profession have taken up their work for the little ready money there is in it, rather than from the love of learning and a love of life, with their ceaseless unfolding of wondrous possibilities. True education is not merely to give us material progress and supremacy. Everyone who does not know how to write his own love letters and business letters today, and read his own ballot, is in serious subjection to his fellow, but there are not enough of them living in America, illiterate as it is, to give remunerative employment on this technical ground of the three H's. The opening of mending-parlors gives better returns than the establishment of such a bureau of information. The three R's are for figures and dates that make full money-drawers, large bank accounts, and too often scant heads and hearts. The three H's assume the stock values of the R's, and make for a perfected life and a just nation. The three R's study history and science in the light of Roger Ascham's precept "A small area well cultivated," almost solely for the earth of the area, and their highest outcome could be only a paid critic of new books or a salaried professor of *belles-lettres*. The three H's take up history and science to discover what is true and false, to exalt the noble and dethrone the ignoble, to admire the beautiful and ignore the ugly. Their truest aim is to make an intelligent being still more intelligent. And their highest outcome is the perfection and supremacy of our humanity and the making of Bishop Wilson's "right reason and the will of God prevail in the world."

The hand is a twin with the brain. The dispositions, temperaments, habits, thought, and lives are written upon the human hand. There is a phrenology in the palms of the hands as well as in the contour of the skull. He that neglects the brains of his hands is as faulty as he that slights the brains of his skull. He who thinks he can't make anything or do some things that are reasonable is plunged into the inabilities of fear and inexperience that besmall the soul. One of the severest blights that can come into the mind of the child or man is the fear of certain inabilities. Fear is a Hercules with "don'ts" and a weakling in "I can's." A person with the brains of his hand uncultivated is incapacitated in a large measure for usefulness and enjoyment. Whatever our youth expect to do in future life, the educational worth of the culture of the hands is comparable with that of any other form of education. The intellectual imagination of the pupil is appealed to over and over in the books and elementary science, but thru the hand the constructive imagination, which is the most vital to the originality and individuality of the child, is still too largely ignored in education.

SWEETNESS AND LIGHT IN THE INDUSTRIAL PROFESSIONS

The education of the hand still has to struggle against the prejudice and vice of the head in past ages. Too many share the sentiment Matthew Arnold expressed in the preface to his *Culture*. He spoke of a really noble monument of munificence, in regard to one of our American universities, and concluded by stating as to its foundation, "yet seems to rest on a misconception of what culture really is, and to be calculated to produce miners, engineers, or architects, not sweetness and light." But by what philosophy, other than the rote of custom, are sweetness and light in education confined to the purely Hellenistic culture? Why cannot reason and the will of God prevail in the hand arts as well as in the classic arts? In fact, the new education of the hand is making reputable avenues to the completest development of life. The bias of the learned professors has shut out a vast amount of sweetness from the old education. The laboring professions have not yet caught up with the literary professions in the scope and efficiency of their culture. Their practical utilities, however, have induced new methods and infused fresh life into the so-called learned professions. They have disclosed the warp in the professions of literary culture of the past. The miner, the engineer, the agriculturalist, or the tradesman can be an embodiment of sweetness and light, and this is the ultimate goal of the widest education of the masses. We have educated some of them just enough to be restless and discontented. The need of the hour is a higher spirit of learning, not begotten by any hole-and-corner organization, but an outgrowth of the best there is in the human mind. A holy discontent is at the foundation of all real progress. How much does the well-directed culture of the hand differ in its noble elevation from that of the brain? It also has an inward activity, having for its characters "increased sweetness, increased light, increased life, and increased sympathy."

THE SUPREMACY OF THE HEART

Some belittle sentiment as a work of weakness. Wholesome sentiment is stronger than intellectuality. The heart sees farther than the eye, feels more deeply than the hand, and understands more profoundly than the brain. The heart is the seer in the kingdom of life. It knows divine writ in sky, in field, in friend, and in God. The heart is the comrade of the hand, and the shekinah of the understanding. Half-hearted is half lost; whole-hearted is the beginning of salvation. The badge of the heart is,

> "A chaplet from the tree of life."

The plea of a great English writer was for "a shade more soul" in the aristocratic barbarians of his countrymen; and a shade more soul is the need of our civilization and the crying want of our entire educational system today. We are bound too much by the mechanics of our profession and have stiffened by the whale-bone of preconceived rule. Welcome method, hail system of pedagogy, commend convention, and hasten interchange of ideas, but, like the hallelujah chorus of the Messiah, rise all with reverend heads in honor of the heart in education.

With the graduates of our schools and colleges there arises the serious difficulty of leavening the crowd. From one of our great universities we have the striking array of 777 graduates this year. The marked increase of attendance in public schools, colleges, and universities must be wisely leavened with increased facilities, or it possesses elements threatening the scholarship and character of our youth. This gathering of the masses in our schools and colleges too frequently means over-crowded classes, over-worked teachers, and a low grade of school work. An English poet has said—

> "Join twenty tapers of unequal height,
> And light them joined, and you will see the less
> How 'twill burn down the taller, and they all
> Shall prey upon the tallest."

The teacher is constantly amid these influences that prey upon the tallest. It is a great privilege and honor to be thus preyed upon, but the tallest taper cannot exist for any considerable time without the self-estrangement of solitude. We have made of the presidents of our colleges and universities business managers. The tendency is to pervert the city superintendent and town principal along the same line. "The nurse of full-grown souls is solitude." And too many of our teachers and school leaders are deprived of this divine nursery. All successful persons, especially in the field of art and letters, have experienced much of solitude. Crabbe said—

> Men feel their weaknesses and to numbers run,
> Themselves to strengthen or themselves to shun.

There is a strength in the crowd, but it is not the strength that will exist, enjoy, and aspire without the crowd. It is not the strength that will inspire, uplift, and regenerate the crowd. Solitude is the insulation of the Almighty in which a man is filled with electric energies of a higher life, and a great need of the American teacher today is leisure for this insulation. The birds that throng all about us with their sweetest songs are in the highest trees, and their coziest nests the most secluded retreats. Solitude is a patch of the infinite letting in the light of a limitless life. It is silence "open-doored to God," and therefore open-skied to the heart of man.

HOUSEHOLD ECONOMICS

It has been said that young women taking higher education in America "should have more Greek and less gravy." A number of us who have toiled thru the magnificences and the beneficences of Greek have no fault to find with its culture, but in comparison with the two, it seems to me the grave need in the domestic education of our youth is more gravy, old fashioned gravy like mother's, abounding in the ingredients of life. This does not mean more grease, more stuffy kitchens, more haphazard cooking and ill-tempered stomachs; but it means more science with practice in the gravy; the be-scenting of the kitchen with the aroma of foods, and the enriching of the stomach of the people with the wholesome red blood that shall nerve the brain, sustain the muscle, and fortify the soul in magnanimous livelihood. Victor Hugo conceives man possessed of three centers: the brain, the heart, the stomach, and says, "Civilization is but a mass, science is matter, religion is blessed with hams, feudality with digests, royalty is obese." He gives the characteristics of the stomach as appetite, satiety, and putrefaction. He makes it break the equilibrium between the soul and the body, and makes Rabelais the discoverer of the stomach's place in history. This conception of Hugo is still too prevalent. Education has overlooked this third center — the stomach in civilization. Learning and science are beginning to hear the divine call of the stomach, to displace its satiety with purity of flesh and its putrefaction with nobility of soul. Household economics is fundamental in the humanities. It is not a few practical lessons in cooking at the summer Chautauqua, but the crowning of a four-year course of higher education beyond graduation from the high school. Household economics makes for the redemption of this third center in civilization. A stomach's god shall no longer be Silenus, as Hugo claims, but the goddess Hygeia; its emperor no longer Vitellius, but the empress Victoria; its animal not the pig, but an exalted man. The stomach shall not be the weight of history, but the generous stay of its stupendous forces, uniting soul and body in safest and wholesomest ministry of life. We determine scientifically the balanced ration that will fit a steer for the market, a horse for strength or speed, a sheep for long or short wool; the whole realm of animal industry is far better provided with scientific information than the nursery of our youth. Now it is high time to feed a human being more fittingly to make a man. The skillet is mightier than the sword.

RE-EMPHASIS OF OLD-TIME VIRTUES

Under these H's some old-time virtues need re-emphasizing. The rapid development of our physical resources, and the consequent ease of multi-millionaires, has begotten a spirit of wrong stature of life. Many of our people have roamed the continent for a better place and greater ease; many have rushed into the cities in hopes of having less work to do; parents declare in the presence of their children that these children shall not have to work as hard as they; these children dream of elysian fields, in the language of the old hymn "dressed in living green," without the intervention of calloused hands and hardened nerves to produce them. We used to hear, "labor conquers all things." Now, luck, chance, and a piece of good fortune secure all things, and the world goes dreaming after it, forgetting that luck is a fool and pluck is a hero. Instead of the certainty and never-failing increase of honest labor, too many have changed the old hymn,

> "Sure I must fight if I would win,
> Increase my courage, Lord!"

to "sure I must speculate if I would win," and it doesn't make much difference whether the Lord is in it or not. Even the laboring people have taken up the idea of there being a laboring class, and we are all making false divisions of our American society by wrong standards of classification. In fitting American girls and boys for truest citizenship, the old doctrine of the nobility of labor must be reiterated to the child of the banker as well as to the child of the hod-carrier. The meanest aristocracy in the world is that assumed thru the pocket or the empty brain. We must ground the youth of our schools in that newest of the old-time doctrine, that labor is the basis of the worth of the soul, as well as the foundation of the value of the dollar.

> "So for all men the law of work is plain;
> It gives them food, strength, knowledge, victory, peace;
> It makes joy possible and lessens pain;
> From passion's lawless power it wins release,
> Confirms the heart, and widens reason's reign,
> Makes men like God, whose work can never cease."

ATHLETICS

The emphasis of physical culture in the education of these recent years makes the question of athletics ever new. The physical education of the youth should be brought still more nearly to the teacher and the school authorities. There is a great waste in the athletics of the hour. Such a waste cannot be fully estimated. There is a severe waste in the number of youngsters that drop out of school because they have gone to seed in play. There is a question about the desirability of an athletic board of a college spending thousands of money, aggregating in some cases $60,000 annually, in maintaining the athletics of the season. It is debatable on which side of the balance sheet will fall the benefits and influences of frequent trips of school and college teams to different sections of the state and of the country fulfilling the reciprocity of games. The matter of football still raises serious problems. Useful means of culture must not destroy that which it is designed to build up. The injuring of life and limb in the training of the physical man has ever been incident of severe exercises, and the injuries and fatalities attending the development of football in our American schools are still causes of rightful alarm. In addition to these we have the "football heart" and the "boat heart" added to the medical terminology of the age. These results emphasize the necessity of the gymnasium, under intelligent management, as the basis of the severe tests in the athletics of the day. There is a tendency to have too many inter-school and inter-collegiate contests; and a diminution of the number would help greatly. Fair home contests among the individuals and classes of the same institution bring, upon the whole, the most desirable results. Conducted in a spirit of more wholesome rivalry, they are freer from abuses, and hence more accordant with the true purposes of education. They eliminate professionalism and avoid the serious loss of time and extra training and extra trips from college to college, and the undue anxiety preceding and following inter-collegiate contests. They secure and maintain quite largely the good results incident to public contests.

But I am not yet ready to advocate the abolishment of inter-collegiate contests. I believe our American youth ought to be so trained in these initial schools of their lives that they can enter into the most intense and partisan struggles with their fellows of other schools and colleges with an unswerving regard for honor, integrity, and fair play. They ought to be so imbued with the spirit of manly conduct that they would count defeat more honorable, in the face of superior strength and skill, than success by foul play and unmanly endeavor. A serious curse of our politics, our business competition, our social emulations, our professional strifes, is the too frequent prevalence of cut-throat methods that have little regard for the welfare, the honor, or the life of an opponent. The ethics of true athletics must make for a higher life among our citizens. I believe that it is in the games which not only the children, but the entire youth of the schools play, that they learn most thoroly the principles of justice, and to yield to public opinion. "Fair play is the earliest conception of justice which enters into the mind of a child," and we must keep sweet these fountains of public life for the health of the nation. The spirit of the old-time contests along the highways, at times of military muster and festive gatherings, and the playgrounds of our public schools, in which everything in a man's possession, his jack-knife, his gun, his horse, his muscle, and wit were put up in friendly struggle with those of his fellows and must come up smiling, even out of defeat, bears wholesome hints for our modern athletics. Football is a soldier's game. If we cannot have it attended with less maimed bodies, broken necks, and shattered nervous systems, it will have a Clevelandic dose of innocuous desuetude.

MENTAL AND MORAL GYMNASTICS

There is a field of athletics whose serious side is still illy understood by parents and teachers—that of mental and moral gymnastics. I still remember the wonderment excited by a venerable professor in college when he said to our class, "Young gentlemen, you have a risky road to travel in coming to be conscious somebodies in the world." In after months the sympathy of his tones became a heaven-born solace, as his meaning dawned thru personal experiences. Unless such periods bring on nervous prostration or suicide, the people, and too often teachers, are largely ignorant of the risks and dangers of mental and moral gymnastics. A broken limb is serious, but a broken spirit is thrice sad. A maimed body is lamentable, but a maimed soul is doubly so. Deformed souls beget deformed thoughts, defective customs and statutes, warped dominance, diseased life and civilization.

> "A people is but the attempt of many
> To rise to the completer life of one;
> And those who live as models for the mass
> Are singly of more value than them all."

But a serious problem is that, as in physical parentage so in mental parentage, our citizenship and civilization bear the marks of the models, "gross and fair," living singly and perpetually among the masses. Untimely deaths upon the playground in life's young spring tax sympathy to its utmost, but when a soul goes out forever by the ungoverned forces of its own awakening, we break down in wonderment and despair in view of the sad spectacle. Next to the destinies of eternity stand the destinies of time's limit and life in the pupil. The average youth does not face the problem of his life's pursuit without the most serious revolutions and evolutions of being; and the finer his metal the keener his struggle. He is thus a chaos, a world-former, a miniature philosopher, demi-devil, and semi-god, and the issues largely are fought out that make for diabolism or for divinity.

The more thoughtful are taking into consideration the seriousness of this life-and-death struggle in the education of the youth. The sanctity and the skill embraced in the delicate conception of Socrates that a true educator is a sort of midwife in aiding the birth of ideas, has not fully entered our method and practice. Too long the spirit prevailed in our educational methods that actuated rude boys in teaching each other to swim. The subject was caught by head and limb and heaved into water over his head, to sink or swim, survive or perish, if he expected to exhibit his personal declaration of educational independence. The hazing and rude initiations of beginners and freshmen, that were long-lived in our country and yet too frequent, were at times the hidden spirit of the master out-cropping wild in his pupils. It was a sort of "let him prove himself a man before showing signs of helping him to become a man." Even the past year a professor in one of our prominent colleges is quoted as favoring hazing because it helps to make a man of a student. Such an instructor has not gotten out of the swaddling clothes of his first summer dresses in college. If public education cannot make a youth respectful for law and authority rightfully expressed, it is a signal failure. Of all places in the world, the student at college must be law-abiding. Barbarous college customs of long-boasted and reputable standing must not blind the goddess of justice. A law-breaker in college must not be allowed to hide behind the nobility of his pursuit or the prestige of class custom, but must answer for his wrongs as any other outlaw. Yet this should be approached with an all-things-are-yours spirit, upon the part of those in authority, that will keep in successful control the world-wide claims of the bounteously generous periods of youthful presumption and assumption.

The fact that inter-class feeling in our institutions of learning is mollified, that the banquet, friendly reception, and good will have taken the place of the pump-spout, the midfield, snipe-like excursions, and midnight orgies is a most wholesome sign of a larger and better heart in our education. The rivalries of our schools and colleges must be saturated with a magnanimity that will appreciate all this soul-worth. The sensitive nature, the right to one's own individuality, feelings, the ideals, the life of each pupil or student, must be sacred and honored by every other. The spirit of the Arab and the barbarian must be abolished from every class, and from rivalries of every character. One does not much blame Shelley, the poet, for his morbid feelings against conventionality, creed, and man himself, after reading the injustice and tyrannies exerted over his delicate nature on the playground by his schoolmates. Yet in school and college today the barbarities of the ape and the tiger of the past come to issue on the part of a number of young stalwarts first awakened to the conscious power of their physical endowments in measurement with those of their fellows. The school atmosphere is not to be one of sickly sentiment, undue fostering, and blind sympathy, but a place of friendly helpfulness, truest fellowship, soul deliverance, and of indirection finding direction out.

HIGHER EDUCATION IN AMERICA

Lower forms of education cannot be eminently successful without clear outlets above. You cannot place a planet alongside of the world without thinking and knowing of the entire system in which it is to serve its part. The most crying need of the times is for the higher education of our teachers and people. Many reputable writers claim that a republican form of government cannot produce great thinkers and the highest form of education. This I do not believe. Yet, as a nation, we can scarcely claim the credit of one great university in the ranks of world-wide light. A very creditable authority too truthfully says that, for what there is best in thought, America, in soberness, is still "a province of England." This humiliates our pride, but should stimulate our holiest ambition. Our educational system has succeeded well in reaching the people as a common family of man. Our aim to educate all people alike has rightfully attracted the attention of the world.

> "A noble aim
> Faithfully kept is a noble deed."

Our educational system is in touch with the masses yet. "The popular breath, even when winnowed by the winds of centuries, is hardly pure." Our poets and painters have scored their successes from the groundwork of our boundless landscapes, ocean-wide fields, and seas of nature.

> "Earth's crammed with Heaven,
> Every common bush afire with God,
> But only he who sees takes off his shoes."

And the trouble is many of our people still stand in their shoes amid these wondrous revelations. Grecian culture, the best in the world, has the scent of the outdoors upon it. We have the conditions of a Hellenistic culture, but not yet the attainments. A philosopher has said, "There are ten thousand chances to one that genius, talent, and virtue shall issue from a farmhouse rather than from a palace." We have the genius of the farmhouse prolific, but not the leisure and the ideals to make it live to the strictest and noblest uses. Descartes, an apostle of literary humility, says, "Those who wish to know how to speak of everything and to acquire reputation for learning will succeed most easily if they content themselves with a semblance of truth which may readily be found." Too sadly, many of our educational folk "know how to speak of everything," but few of them know how to speak everything of anything. We have academic universities, business universities, normal universities, college universities, but scarcely a university. This should not detract from the merit of many higher institutions of learning in our land that are doing the best they can with the material at hand. Higher education is all-sidedness. A trenchant writer has said, "The American people seem still to be somewhat in the position of our new millionaires. Their fortune is above them; it overshadows and oppresses them; they live in fine houses and have common things, they have costly libraries and cheap culture, and their rich clothing poorly hides their coarse breeding." We can allow such words only from a fellow countryman and a patriotic American. They are the truth for the ears of our inner household circles. Some of our millionaires as patrons of learning are doing nobly in establishing great libraries, universities of learning, conservatories of music, and museums of art. Emerson says, "It is a rule that holds in economy as well as in hydraulics that you must have a source higher than your tap; the mills, the shops, the theaters, and the caucuses, the college, and the church have all found out this secret." But these higher sources on tap must be kept scrupulously wholesome. You may remember several years ago how a frightful epidemic raged in one of the cities of the Alleghanies because in the water supply of the mountain heights fever germs had gained harborage. Mountain heights alone are not sufficient in advanced education.

Out of the short ranges of today grow the dangers of the school-desk. Educational leaders must live back into the ages and then secure new births and give "foreign shape," as bespoken by Schiller for artists incarnated of the centuries and home-made to these youth and this present-day civilization. Higher education is myriad-horizoned. Like

Shakespeare's plays its thousand-mindedness makes the college and the university graduate, who is a college and a university graduate, composed amid many conflicting planes and visions, theories and doctrines, problems and solutions, conflictions and triumphs, middays and midnights, a nursling from "the milk of a better time." Metternich said: "Revolutions begin in the best heads and run steadily down to the populace." The higher education of the country leavens our civilization with the learning of the best heads, enlightening like a meridian sun hovel and mansion alike. In learning there is a solid gold chain of enlinked highers—higher mathematics, higher English, higher history, higher literature, higher physiology, higher astronomy, higher science, higher art, higher philosophy, and now we must add higher business education, higher household economics, higher agriculture, higher mechanic arts, higher government, all culminating in the higher life. The most encouraging thing about the system of our higher education is the

"Effort and expectation and desire,
And something ever more about to be,"

so markedly prevalent in the hearts of our scholars and youth. And, tho of Wordsworth's glorious creatures in higher education only one is to be found in ten thousand, yet our institutions, our free government, and liberal education of the people predict an affirmative answer to the question of higher education in America.

"What one is,
Why may not millions be?"

THE MOST RECENT IMPETUS OF HIGHER EDUCATION

The past year chronicles two centuryfull marvels in effort for higher education: the Carnegie Institution at Washington and the Rhodes' bestowal of American scholarships for Oxford. The Carnegie plan of research is as universal as the aspiration of man for knowledge. Its scope is more extensive than that of a university. The Carnegie benefaction bestirs and fosters the originalities of a student, an inventor, or an institution aiming at the supreme merit of man and the universal welfare of mankind. The Rhodes benefaction tends to brotherhood and cosmopolitanism in education. Its outcome should be to foster learning for learning's sake and the man's sake, apart from provincialism and sectionalism. These bestowments for higher education in the world hasten the embodiment of universal life, subordinating station, geography, and nation. In the scholarship of the new ages they should prefigure

"The season by gifted ones foretold,
When man shall live by reason and not alone by gold,
When man to man united—"

not as an American, nor as an Englishman, nor as a Frenchman, nor as a German, but as a cosmopolitan whose supreme citizenship is of the universe.

SOME PRESSING PROBLEMS

DR. NICHOLAS MURRAY BUTLER, PRESIDENT OF COLUMBIA UNIVERSITY, NEW YORK CITY

[STENOGRAPHICALLY REPORTED]

Mr. President, My Fellow-Teachers, Ladies and Gentlemen:

No one who meets year by year with the membership of this vast national Association, and no one who rises to face an audience like this, can permit himself to doubt for an instant the vitality and public importance of our present-day educational problems. As a great people, we seem to the world to be more concerned with matters of government, of finance, of commerce, and of trade; but every true American citizen knows that deep down in the heart and conscience of the people lies serious concern for questions of public education. We have convinced ourselves, and it may prove to be our lot to convince the world, that education lies at the basis of democratic institutions, of material prosperity, and of the public weal.

We, who are born, as it were with the golden spoon of a rich and ripened civilization in our mouths, hardly realize how new this point of view is, or how recently it has obtained recognition among the peoples of the earth. It is, as the studious teacher knows, the offspring of the thought of the century which has but just closed. So rapidly has that thought progressed, so manifold have been its conquests, that we accept as axioms propositions of which our grandfathers had hardly ever heard. They might have read of them in the writings of the philosopher or the publicist, but it was beyond the dream of their wildest imagination that these great truths and principles should within any reasonable time conquer the intelligence and the conscience of a great nation of freemen.

I hold that we have not come together here merely to discuss and consider questions of technical and professional concern. Some of the questions which we consider, and some of the papers and addresses to which we listen, relate themselves more directly, it is true, to general public interest than do others, but there is no question, whatever the topic, presented to the members of this Association assembled in their great annual meeting, which is not in a sense a question that touches the public welfare, because it bears upon the life-history of some one individual child.

It goes without saying that if we were dealing with a series of problems which had been solved, if we were dealing with a series of events which had been halted, and with a scientific life which had been lived, our task here and elsewhere would be little more than one of anatomical dissection. We might pick apart the limbs of the dead body to allay and satisfy our curiosity, but the public at large would care little for what we said and did. It is just because the reverse is true, and because we are dealing with living truths, developing before us and thrusting living problems upon us while we speak—it is because of this that these discussions of ours are of such vital and far-reaching public importance.

It is because I believe so absolutely in the practical importance of these problems, and because I am so entirely convinced of the general public interest in their right solution, that I shall undertake this evening in a few brief moments to discuss with you two matters which seem to me at this time to deserve most careful attention from us and from our fellow-citizens. I do not undertake to say that I have chosen for discussion the two most important and the two most significant problems, because as to that we might honestly differ; but I do hold that the two matters which I propose briefly to discuss are problems pressing for solution at your hands and mine, and important in the highest degree.

I wish to speak, first, of the problem presented by what I conceive to be the waste in our present educational system. My observation and reflection have convinced me that as matters now are we take too long to do too little. I wish to expand that thesis for a few moments in order to make clear just what I mean.

You do not need to be reminded that among the nations of the world we have the reputation of being a wasteful people. Nature has dealt kindly with us, fortune and Providence have smiled upon us, and our colossal growth and great material expansion have produced an economic waste which, if translated into concrete figures, would reach amazing proportions. I hold that this same element of waste has crept into our educational system, and that it has tended to increase during the last generation, and that it has now reached the point where it is our duty to consider seriously whether we may not check and overcome it.

I judge that there is waste in our educational system because of two series of facts that are open to the observation of anyone. The first is the fact that the boy who goes thru our educational system from top to bottom has grown to mature manhood and has used up much more than one-third of his probable life before he is ready to enter upon a practical career. Add to the years of the kindergarten the eight and sometimes nine years of the elementary school, the four years of the secondary school, the four years of the college, and the three and now four years in the professional schools of law, medicine, engineering, and the rest, together with the necessary years of almost unpaid apprenticeship, and the boy is quite unprepared to face the world as an independent, self-supporting man until he is nearly thirty years of age. Those of us who have to deal with the higher education are vitally impressed with that aspect of the problem, but there is another. I take into consideration also the fact that the average total education of an American citizen is five years of two hundred days each, or only one thousand days. There is still another germane fact, namely, that the average annual attendance of the pupils actually enrolled in the schools is but ninety-nine days, and I ask whether we dare waste even one of those precious days in the life of the pupil, the sum total of whose formal education will be completed when that brief period of one thousand days comes to an end.

This waste in our elementary, secondary, and higher education is a matter which, perhaps, I need not discuss in detail, because I think it is very generally admitted. I am concerned with trying to point out, if you please, what seems to me to be one chief cause of this waste, and then to point out what seems to me to be at least a partial remedy.

We cannot afford to come to an agreement that there is a proved cause for this waste in our education without making conscientious and intelligent effort to remove it. If one student is unsuccessful in assigning the cause and prescribing a remedy, then let other students take the problem up and face it in a scientific spirit, until by our united efforts we have succeeded in solving it.

It seems to me patent that waste occurs chiefly at two points in our educational work. I am distinctly of the opinion that the four lower elementary grades, the primary grades as they are called, and the four years of secondary work in the United States are, on the whole, thoroly well and economically occupied. I am convinced that the waste is serious in the four upper elementary, the so-called grammar, grades, and in the college; and I believe, and believe firmly, that we must shorten the time given to the upper elementary grades and shorten the time given to the college, because we are now taking longer than we need to do the modicum of work allotted by common consent to the students in these two stages of our education.

Why should there be waste in the upper elementary grades and not in the lower? And before answering this question I want to pause long enough to say that every year trained European observers from France, Italy, Russia, Germany, England, and other countries come over to study our educational system, and every trained European observer who has visited our shores during the past five years has asked why it is that our upper elementary grades are so much below our lower elementary grades in educational efficiency. In other words, I am not resting upon my own judgment or on the results of my own personal observations and the observations of those with whom I have conferred. I am resting also upon the judgment of trained observers from other lands who have looked upon our work dispassionately from without.

My answer to the question is that this undoubted waste is due to two easily ascertained causes. First, lack of sufficient scholarship on the part of the teacher; and, second, the growing tendency to exaggerate the importance of method in teaching.

Lack of scholarship is always wasteful in teaching, for the reason that it takes a long time to teach what you do not know.

After a child has been in school for four or five years he is brought by the course of study to the point where the subjects begin to divide. They begin to take on separateness. The pupil comes in contact with the higher reaches of knowledge, and no person short of a genius can command the scholarship to teach wisely and economically the whole series of subjects which are represented in the upper elementary, or grammar, grades. To prepare teachers adequately for the work now required of them in those grades is an absolute impossibility.

We need, first of all, so to rearrange our work in those grades, and so to readjust the teaching of the subjects there, that we can command better scholarship. We cannot do this until we divide the subjects among several teachers.

Second, I hold that the tendency of the last twenty-five years to exaggerate the importance of method in teaching has resulted in holding back students who are eager and ready to go forward with the subject-matter.

Let me illustrate what I mean. Two generations ago it became patent to the people of this country that mere scholarship was not a sufficient preparation for teaching, and schools came into existence whose object was to prepare teachers by a study of method. That was a desirable, indeed a necessary, reform if the schools were to increase in efficiency beyond the point they had then reached. But I am clear that that movement has now gone too far, and that teachers of method have now become enamored of method for method's sake. They have forgotten that method is a means and not an end, and their fine-spun analysis and long-continued preparation of a very simple lesson is like placing a great, huge vestibule before a very small and insignificant house. It makes education wasteful in the highest degree.

Not so many weeks ago I was visiting a grammar-school class in arithmetic, and I saw forty pupils, bright and intelligent, devote a period of forty minutes to one example, most of the time being devoted to putting it on the board in a precise and specific fashion. A great deal of that sort of exaggeration is going on in schools on every side. We must go back to first principles and remember that the fundamental matters in the training of the teacher are two: scholarship and a firm grasp of educational principles. Add to these the true teaching instinct and spirit, and this scholarship will develop a sound method from the fundamental educational principles as a matter of course.

To attempt to substitute schoolroom method as a special subject of study for a knowledge of the fundamental principles on which method rests, and out of which it proceeds, is absurd; to attempt to substitute it for scholarship, which is the basis of the whole relation between teacher and student, is yet more absurd.

It seem clear to me that in the upper grades of elementary schoolwork we must come back to a new conception of the relation of the teacher to that work, and that we must give opportunity for, and insist upon, greater scholarship and cease laying emphasis upon method for method's sake.

Many of you have read the elaborate instructions given by Quintilian for the building up of an oration. I have no doubt the directions of Quintilian were practical and useful, as oratory was practiced in ancient Rome, but I think one might safely say, woe to the ordinary American orator who should endeavor to detain his audience while he slowly built up his oration according to the strict letter of Quintilian's rules. Just so there is too much machinery, too much artificiality, too much scaffolding in our schoolroom method, all of which tends to hide the main structure, the chief purpose of the educational process.

I have sometimes thought that those who are so fond of exaggerating method are very much in the position the Good Samaritan would have been in if, upon finding the poor traveler upon the roadside on the way from Jerusalem to Jericho, he had taken a good look at him and had then gone off and written a monograph on the relief of the suffering. What the traveler wanted was relief, not to be made an item of scientific study. Exactly the same thing is true of the growing child. He wants a place found for his training, his instruction, his development, and not to be made a mere experiment to serve the purposes of some study carried on for quite a different end.

My contention is that we must give up all this exaggeration of method, and come back to the ideal teacher's training, namely, that system of training which puts a new emphasis on scholarship, new emphasis on educational principles, new emphasis on the teaching spirit, and which subordinates method to all three of these.

This seems to be a matter which has a moral as well as an economic aspect. I hold, my fellow-teachers, that we have no moral right to practice upon a child. And I hold that we have no right to spend time and money intrusted to us by the community for the purpose of education for anything whatever but the most direct, the most useful, and the most efficient teaching.

If we can remove these sources of waste in the elementary school the very first result will be to keep the children, certainly in cities, longer in school. I have made sufficient inquiry from principals and parents to become convinced that a very considerable proportion of those boys and girls who leave school before the completion of the course leave it because they feel they are not getting value for their time. I know that there are other reasons, which are repeatedly advanced, and there is force in every one of them; but I say that some proportion, I am not prepared to say what, of the great army of children who never reach the high school at all are deprived of that advantage because they or their parents feel dissatisfied with the result of the time and effort given to the elementary-school course.

I am convinced that we ought to be able to accomplish in six years, at most in seven, what we are now doing, as a rule, in eight. I commend to those of you who are interested in following up the details of this matter the report of the superintendent of schools of the city of Cambridge, Mass., where it is shown, after carrying the statistics over a period of seven years, that those students who complete the elementary-school course in the shortest time complete the high-school course with the greatest credit; those who complete the elementary-school course in the intermediate time complete the high-school course with somewhat less credit; and those who complete the elementary-school course in the normal time complete the high school with the lowest degree of credit. This is an actual experiment, worked out in a community of about one hundred thousand souls, and it throws light on just the point which I am making.

I am not going to detain you with a discussion of this problem, so far as it concerns the college, farther than to say that we are faced there by practically the same conditions. The trouble in the colleges is not, as has sometimes been thought, too much scholarship; it is lack of appropriate scholarship and lack of teaching spirit that waste the time there. I am sure that time can be saved in the college course, and that time must and will be saved in the very near future. When this happens, and when the work of the upper elementary grades is properly adjusted, we shall have accomplished two important things:

First, we shall have enriched the life and opportunity of the hundreds of thousands of children who must get all of their education from the elementary-school course; and we shall have decreased, perhaps by 10 per cent., the length of time allotted to the task of getting ready for the work of professional life or for the highly specialized callings which depend upon a college education as preliminary training.

This, then, is my view of waste in education as I see it, and these are the rough and brief suggestions which I make for its removal.

Let me now pass to another matter not at all related to that of which I have spoken, one about which I know there is great difference of opinion. It is partly for that reason that I propose to speak of it with entire frankness.

I want to call attention to a phenomenon which is so universal that we do not notice it—paradoxical tho that sounds—but which, if it is permitted to continue, will one day produce most startling results in our life and civilization.

I refer to the facts that owing to a series of causes, operating over a considerable period of years, knowledge of the English Bible is passing out of the life of the rising generation, and that with this knowledge of the Bible there is fast disappearing any acquaintance with the religious element which has shaped our civilization from the beginning.

Not long ago my friend, President Thwing of Western Reserve University, printed in the *Century Magazine* the results of an ingenious inquiry on this subject, which he carried on among college students. His purpose was not to find out what they knew about theology or what they believed about religion. His purpose was to find out what they knew about the greatest work of English literature. Those of you who have read that paper will remember the astounding results that his inquiry revealed.

In what I am going to say about the English Bible I want to make myself clearly understood. I want to make this fundamental distinction clear: I am not now talking about instruction in religion, important as many conceive that to be. I am not talking now about instruction in theology, important as some feel that to be. I am merely laying down this thesis: the neglect of the English Bible incapacitates the rising generation to read and appreciate the masterpieces of English literature, from Chaucer to Browning, and it strikes out of their consciousness one element, and for centuries the controlling element, in the production of your civilization and mine. I hold this to be true, even if there were not one person living in the United States who subscribed to a single article of any Christian creed. I am speaking now about literature and life, not about religion or theology.

I hold in my hand an edition of Milton's *Paradise Lost*, edited and annotated by a member of this Association. I want to read in this presence a few of the opening lines and tell you what happened when I read them in another presence not so long ago:

> Of Man's first disobedience and the fruit
> Of that forbidden tree, whose mortal taste
> Brought death into the world and all our woe,
> With loss of Eden, till one greater Man
> Restore us and regain the blissful seat,
> Sing heav'nly Muse, that on the secret top
> Of Oreb, or of Sinai, didst inspire
> That shepherd, who first taught the chosen seed,
> In the beginning how the heav'ns and earth
> Rose out of Chaos; or if Sion hill
> Delight thee more, and Siloa's brook that flowed
> Fast by the oracle of God; thence
> Invoke thy aid to my advent'rous song,
> That with no middle flight intends to soar
> Above the Aonian mount, while it pursues
> Things unattempted yet in prose or rhyme.

I read these lines to a company of college students, students who came from cultivated homes, who had enjoyed the advantages of a liberal training, and in that company of students there was not one who could make sense out of any line but the last, "Things unattempted yet in prose or rhyme;" I submit that the same is probably true of a majority of this audience.

Teachers all over this land are trying to teach Chaucer and Spenser and Shakespeare, Tennyson and Browning. How are they to understand men who refer to the Bible, that veritable treasure-house of literature, on every page, if they cannot take children to the source from which the supply is drawn? How are they to discuss and interpret the style of Ruskin, of Carlyle, of Emerson? How are they to teach the history of the heroes of our own independence, many of whom were religious in every fiber of their being, and whose work will continue to bear the stamp put upon it at the beginning, utterly regardless of what has become of religious faith in the interval? How is one to teach the truth as history reveals it, unless he teaches the whole truth? And yet, see what has happened: The quarreling of religious sects, of churches, each claiming this book for its own and denying the truth of what other persons find in it, has brought about a state of affairs in which the English Bible, a fountain of English literature, has been practically stricken from the reading of a large proportion of the American people.

Some years ago I was present in the city of Jerusalem at the extraordinary celebration of Easter day in the calendar of the Greek Church. There were gathered in the Church of the Holy Sepulcher representatives of Christian communions from beyond the Ural mountains, from the far regions of Abyssinia, Copts from Africa, together with representatives of the nations of western Europe. When at high noon the supreme moment came, the visitors were treated to this shameful spectacle: Representatives, many of them clergy and high officials, of churches calling themselves Christian, were engaged in physical struggle for place that they might see, and were held in place and kept from assaulting each other by the sneering Mohammedan soldiery. Have you ever thought of the significance of a sight like that? Mohammedan soldiers, despised Turks, with cynical sneers on every face, held these devoted Christians from tearing each others' eyes out on the most sacred spot in Jerusalem. It is just this sort of thing that we are reproducing on a small scale in our bitter sectarian controversies over the interpretation of the Bible.

I contend that we are not only on the point of impoverishing life and literature by the neglect of the English Bible, but that we have already impoverished life and literature. I am not dealing with a problem that lies in the future, I am speaking of a condition which is at hand. We are impoverishing life and literature by striking out of our life and our reading one great monument of our literature, the source from which much of what is best in later centuries is drawn, the inspiration upon which the best English style has been built.

My own feeling is that what has come to pass can only be described by one word, shameful! I regard it as shameful that we have permitted, blindly no doubt, this tremendous sacrifice of literature and life and knowledge because we cannot agree upon questions of religious and theological interpretation. Why must we wait for agreement in matters of exegesis before we study matters of history and literature? Why should we not go back to a study of the source from which much of our noble English speech has come? More than that. How do you propose to teach American history without teaching the pupil who sits in front of you the controlling motive that drove the pilgrims to the New England shore? How are you going to explain that migration unless you teach the cause from which it sprang? How are you going to teach the history of Europe? How are you going to teach anything that has happened since the breakup of the Roman empire without teaching that the controlling element in most of it was the sum total of the conceptions and feelings which we sum up under the name of Christianity?

One does not need to be a Christian to live in a Christian civilization. He lives in it whether he will or no. We are face to face with a series of facts which have been in process for nearly two thousand years, and this applies as well to the non-Christian as to the Christian. The non-Christian needs to read this literature, because he wants to understand it.

My contention is that we have made it impossible for the pupil to understand history and literature as they really are, because we have eliminated from his reading and study that which has been from a very early period a controlling force in both.

We study the religious books of other peoples, and hardly know our own. We do not study our own because we do not agree about the theological interpretation of them. We study the religious books of other peoples because we do not feel a direct personal interest in the theological interpretation of them, and the result is that we are today training more pupils to understand the elements that make up the life of ancient Rome than we are training to understand the life of our twentieth-century civilization.

I forbear to dwell longer upon this subject. It interests me exceedingly, but I have no reason to assume that it is as interesting to others.

I want once more to make it perfectly clear that I am not talking about religious teaching in school; that I am not talking about theological influence in education; but that I am only protesting against sacrificing a knowledge of our civilization to theological differences. I beg that I may be understood distinctly on this point.

I know that the supreme court of the state of Wisconsin has held the Bible to be a sectarian book. I know that the state statute-books are full of laws prohibiting the reading of the Bible in the school. My view is that this is wrong. I am not in the least concerned in disputing that it has been done, but I think the time has come for us to regard it as a pressing problem to begin to get it undone.

As I said at the outset, I have selected these two subjects to speak of here in your presence, not because you will all agree with me that they are the most important or most pressing, but because I think they are very important and very pressing, and because I know there is a sharp difference of opinion about both of them. I am very much more interested in discussing things about which there is a sharp difference of opinion, and where there is a fair chance for open debate and controversy, than in talking over the old truisms upon which all agree. It is in that spirit that I have ventured to discuss these two problems, (1) waste in our educational system, and (2) the situation presented by the lack of knowledge of the English Bible as a work of literature, the source of knowledge of a controlling element in our historic civilization.

THE ENGLISH IDEAL OF EDUCATION AND ITS DEBT TO AMERICA

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Standing before this great assembly, an English student of education would wish his first words to be words of gratitude for the unstinted kindness which is shown to those who come from a distance to gain guidance and encouragement from American educators and American schools. We in Europe owe much to your educational experience and still more to your educational faith. Our desire to learn from you has never been so strong as it is today. Your British guests at this convention, and those whom you have welcomed with equal cordiality before, have come to learn, and, like good teachers, you have spared no pains to help us. Your kindness is all the more appreciated by us because we realize that you show it to us as being, in a measure, representatives—spokesmen for a great multitude of British educators who cannot themselves come to America, but who, if they could come, would do so in the spirit of admiration for your achievement and of confident hope for the future of your schools. I wish that I could adequately express to you the deep feeling of friendship and sympathy with which students and teachers and pupils in my own country regard American educational work. Profoundly attached as we are to what is strong and good and true in our own methods of education, we have learned many lessons at your hands, and we are prepared to learn more. We cannot directly imitate you—at least in some things—for every nation is in part controlled by its own past and cannot change its methods of education as if they were merely mechanical devices of photogravure or electric traction. Any ideal of education which is alive (and that of England is very much alive) has its roots deep in history and possesses profound psychological significance. It is not a thing to be lightly tampered with or recklessly destroyed. But if we cannot directly imitate you, we can and do heartily and affectionately admire those points in which, by reason of opportunity and circumstance and the looser grip of controlling tradition, you have excelled us in the public organization of your schools and universities.

You cannot wonder that in our hearts we should be proud to think that the world's belief in the power of education has been deepened by the faith, the undaunted persistence, the liberality, and the business-like idealism of a nation which still has so many ties of kinship and association with the old home. And when, therefore, your President honored me with an invitation to address you tonight, I came to the conclusion, tho with much misgiving as to my power for the task, that I should, perhaps, not do amiss if, during the time which you are so good as to spare to me, I were to attempt to sketch the ideal of English education and to measure its debt to America.

The keynote of all the best educational thinking of our time is hope. Never before has the work of national education been so full of profound interest to the teacher, the student, and the statesman, or so full of promise for the future. We are hopeful because so much has already been accomplished, because so many formidable and threatening difficulties have been overcome. Three things especially call for thankfulness. We are thankful for, first, the growing and now almost universal recognition of the fact that all human beings, however humbly born, have the right to the fullest possible measure of that physical, intellectual, and spiritual development which is appropriate to them and for which they are ready to make the necessary personal sacrifice of effort and of time. Secondly, we are thankful for the wonderful results which have followed most conspicuously in the sphere of applied science, but not less in other fields of human effort, from brave and single-minded devotion to exact truth. Thirdly, we are thankful for the proofs—so plain to those who have eyes to see — that, stupendous as have been the achievements of men thru the mastery over many of the forces of nature which machinery has placed in their hands, the greatest of all facts are still the spiritual facts — love, will, faith, endurance, self-sacrifice.

But no standing still is possible. Our very success makes further advance imperative. Applied science is rapidly changing the conditions of industrial life. It is multiplying certain kinds of opportunity, but also fixing the boundaries within which opportunities must be found. Much forethought and wise guidance will be needed to prevent the growth of economic and social conditions which would gravely hamper some healthy forms of individual initiative. Much wise teaching, much noble example, will be needed to prevent some of the rising generations, who grow up under the domination of applied science, from suffering a sort of atrophy of the moral will. Again, in the decay of old restraints, it is becoming pathetically plain that some upholding tradition and authority are needed for the welfare of many human lives. And, lastly, the instinctive longing of so many hearts for certainty and guidance is revealed on all sides of us by signs of spiritual unrest.

These things profoundly affect education, because all true education is a mirror of life. The result is that all over the world educators are taking counsel with one another, in order that, in the difficult times which are coming upon us, we may have at our command a wide knowledge of what is being done by teachers in countries far away and of what was done by teachers in times remote from our own. Nothing is less characteristic of the educational student of our day than complacency and confidence in his own knowledge. It is, indeed, a difficult problem which confronts us all. How many things have we not to seek to combine: The stimulus which makes an alert intelligence: the discipline which trains to bodily and intellectual self-control; those deeper influences which fortify against temptation and help us to bear sorrow and loss and pain; and that highest kind of individuality which purges itself of self-seeking thru service to others — dying to live.

Other causes, too, make it natural and easy for us thus to compare our educational experience. Distances are shrinking by reason of swift and cheap means of transit: the post, the telegraph, the press and photography are bringing distant people into closer contact and are giving them a more vivid realization of one another's lives and needs. And a great psychological change is coming over the world thru the spread of education in its wider sense. People are more impressionable to new ideas, readier to welcome new influences. In all quarters of the world we can see opening doors.

Thus it is that we can see gathering before our eyes, as it were, a great procession of the nations, each bringing into the world's common stock its own tradition of excellence, its own native insight into truth. Each, indeed, brings with it much that it would fain forget, but each brings also much that the others would fain receive. Germany comes with her noble idealism and her patient devotion to scientific truth; France comes with her insight into the significance of political ideas, with her exquisite lucidity of thought and speech, and with the measured beauty of a still living classical tradition. Scandinavia comes with her refinement of home-life, her skillful training of bodily powers, her care for adult education for laboring men and women, and her wise use of handicraft as a means of intellectual and moral training. America comes with her genius for self-adaptation and for assimilating diverse elements under a common flag; with her power to seize great opportunities on a great scale; with her intense belief in the value of individual development, combined with her not less striking readiness to subordinate, in moments of crisis or danger, individual interests to the claims of collective advantage or to the needs of public discipline. Russia, the true Russia, comes with her intense love for the plain, common people; with her passion for self-surrender and self-sacrifice; and with her pathetic resolve to see things as they are and to paint things as they are, preferring the beauty even of ugliness and of despair to the illusions of an unreal view of life. And then comes, too, the far East, nearer to us all than ever before, and yet how indescribably remote, with her symbolism, her quietism, her fatalism, and the mysterious undertones of her immemorial philosophy. These eastern voices may not yet be heard above the hubbub of our trains and cars and industrial activities; but they are waiting to be heard, and their time will surely come when we realize that quietude and withdrawal and contemplation are among the better things of life, and when we grow weary at last of

> "that unrest which men miscall delight."

I have not yet spoken of what Great Britain and Ireland bring to this gathering of experience. Small as those islands are on the map of the world, they have brought, and are bringing still, a very varied gift. Celtic Ireland comes with her genius for romance, with her deep springs of pathos and of poetry, with her charm of style, and with her allegiance to the memories of the past. Scotland comes with her supreme gift of manliness and self-control, with her passion for adventure, her love of the open air, her deepest humor, her iron faith, her philosophical power, and her faithfulness of word and deed.

And last I would speak of England. England, that land of deep, silent feeling, of strange contradictions, and of conflicting ideals, the common home of Wicklif and Sir Thomas More and Drake and Shakespeare and Bacon; of George Herbert and Nicholas Fonar; of Richard Baxter and Col. Hutchinson and Oliver Cromwell and George Fox; of Puritan, Anglican, Quaker, and Catholic; England, which has always been so well and tenderly served by some part of each old régime that she has never at any revolution swept the whole or any one of them away; England which cares so much for the things which lie at the root of true education that she has never yet been able to agree to any one simple plan for the provision of a common education compulsory and uniform for all alike.

I believe that in no country in the world—considering its size—has there been a deeper concern for education in its wider sense than in England for the last two generations. The force of educational zeal has been strong enough to have removed the barriers to reasonable social equality, and to have scientifically fertilized our rural districts by a wise and far-seeing diffusion of the human residuum of our great cities. But the force has been unhappily divided in its application, and much of it has been spent in a sort of deadlock of pathetically conflicting ideals. There has, indeed, been great advance: public funds have been spent without stint. The world hardly realizes what strides have been made by primary, secondary, and technical education in England and Wales during the last thirty years. But the same effort and outlay would have produced much more striking, and in some ways more valuable, results, had they been concentrated on the building up of one system of schools instead of on the concurrent development of what are in effect different systems of schools representing different ideals of education. Tonight I cannot enter into the explanation of this contorted, painful growth. It has been the outcome of many ancient causes, not of mere stupidity or extravagance. In the sphere of modern educational administration we in England have had to pay a heavy price for the intensity of our inherited convictions, and for that wonderful variety of spiritual and racial elements in our body politic which has been the secret of the freshness, the elasticity, and the power of our national life.

But thru all this mist of misunderstanding and conflict, the student feels that he can trace the lines of agreement among most thinking and responsible Englishmen as to what should be the aims of English national education. This ideal, never yet realized on a commanding scale, but never failing to realize itself in patches here and there, can be stated in a very few words, tho it is the most difficult ideal in the world effectively to put into operation.

Education, as an Englishman conceives it, is not an affair of schools or colleges alone, but of a variety of influences which subtly play upon our will and color our thinking and have their outcome in an attitude of mind, in a tendency to certain type of judgment, in a sympathy toward certain forms of life and institutions, and in a deep love for old familiar ways and faces. How many things go to form these currents of influence, and how comparatively few of them are affairs of the schoolroom or limited to the brief hours of our school life! Love of father and mother, of sister and brother, of the old home, the public opinion of our playmates and of our companions in study or in work, the iteration of

> "Familiar matters of today,
> Some natural sorrow, loss or pain
> That has been, and may be again."

Words which fall on our hearts in worship, thoughts which cross our minds in solitude, the suggestion of some familiar friend, or

> "Tasks in hours of insight willed,
> To be in hours of gloom fulfilled."

And far more ancient and mysterious things than these — strange outcrops of instinct, dim hints from the depth of our nature, the unspoken assumptions of national life, loyalties which lie too deep for words, but which are learned from example — these, and not direct instruction only, are among the unnumbered influences which in their sum and complex aggregate make up what we mean by education. Some of these influences the school should focus; some it should generate; for others it should prepare us. But education is a larger matter than pedagogy; it is really the training of life.

And therefore such part of education as is formal instruction should prepare for life. It is easy to say that, but very hard to say how it is to be done. Yet far harder still is it to say what shall be the kind of life for which we are to prepare. A national system of education involves, implicitly or explicitly, a definite theory as to the right ordering of national life, alike in its economic and spiritual aspects. The building up of a stable form of education for life involves either a stable condition of society and an equilibrium of social forces, or extraordinary foreknowledge of the future and a far-seeing adjustment of means to definitely intended ends. But all over the modern world the current of social, economic, and intellectual change is running like a mill-race, and to whom is it yet given to foresee the future and to predict how far hence this fierce and tossing torrent of social change shall sink into calm rest in some pool, as when

"The swan on still Saint Mary's lake
Floats double, swan and shadow."

Next, we believe that education must train character as well as sharpen the intelligence. By character we mean, in part, the power of saying No—the trained power of knowing when, and why, and how, to say No. The greatest things which have been written about education by Englishmen have been written not in treatises on pedagogy but in poetry about life. The ideal outcome of education is

The reason firm, the temperate will,
Endurance, foresight, strength, and skill.

It is not unfitting to quote these words of Wordsworth in this connection, because Wordsworth is our English Pestalozzi.

As it is the root belief of Englishmen that education should prepare for life, and as there are many kinds of life, it follows that there will be many types of school training. Our conception is that the national system of education in England should be an intentionally variegated system: not a pyramid of state schools built out of uniform materials ("standardized," as the saying is), but, as it were, a free national federation of schools of very different kinds, teaching different things from different standpoints, but all jointly recognized as forming part of the national provision of schools; some mainly literary, some chiefly practical, some predominantly classical, some predominantly modern, but all humane, all enjoying great freedom in their choice of studies and methods of teaching, but all in return recognizing as a common obligation the duty of high efficiency and of devotion to the national cause; and all grouped in a clearly intelligible manner, so that there should be no doubt as to the educational service rendered by each of them. Such a system would be costly: but in education is it not cheap and pretentious inefficiency which is really dear? In the Middle Ages the genius of England lay in artistic handicrafts, in its local piety, and in the planning of communal recreation. We want to revive all this without its excess and its superstition, but with all the resources of modern science, and as a factor in a healthy, keen, aspiring national life. We owe to John Ruskin and to William Morris the warning that too much of our modern life is wastefully ugly, and that a strenuous England may be a merry England, too.

We are opposed to anything like uniformity in education, because we believe that very much depends on the free personality of the teacher and on the characteristic atmosphere of individual schools. What would English secondary education have been without William of Wykeham and Winchester; Dean Colet and St. Paul's; Dr. Arnold and Rugby; Mr. Thring and his work at Uppingham.

Schools are not dead counters in a game: they are centers of living influence. What John Henry Newman said of Oxford is true of every great school which makes men and which men love.

Our view is that the true ideal of national education is not an interlocking system of schools, machine made to pattern, but a free and willing union of self-governing institutions, diverse in their methods and tradition. And this view is confirmed by the fact that the very process of education itself is an ever-varying combination of opposites. It teaches us to inquire and to question, but also to obey and to believe. It fails unless it strengthens character as well as sharpens intelligence. It has regard to the training of the body and the training of the mind; to personal responsibility and freedom, but also to the claim of the community on each of the individual members of which the community is composed.

It calls into its service each and all of the elements of culture: science and letters, manual training and artistic expression, physical exercise and moral discipline, according to its judgment of the needs of place and time. It is an artistic and spiritual work; a communication of life, full of diverse and apparently conflicting influences, and yet itself a whole.

In the noblest kinds of education there is something that reminds us of what was said of the countenance of Fénelon: "It combined everything, and yet the greatest contradictions produced no want of harmony."

Such is, as I conceive it, our English ideal of education. It has realized itself far oftener than we know, because the best things in England are "obscurely great." But for the last 150 years it has been struggling in vain to realize itself on a large national scale. The struggle has been fruitless, because during that period we have been passing thru a prolonged crisis of industrial and spiritual change, and the English ideal of national education really postulates a state of economic and intellectual stability. Moreover, during the same period of years—and for reasons nearly connected with our inner conflicts of national ideals—we have been building up a vast empire in the East, the claims of which profoundly affect the work of our higher schools, and render what was already a complex task more complex still.

I would that it were possible to strengthen the ties of personal intercourse between American and English educators. We have very much to learn from you; perhaps in our multiform variety of schools you would find material of interesting study. It is much to be desired, from an Englishman's point of view, that more of our ablest young men and women should come to your universities for courses of post-graduate study, and I hope that ere long our great English universities will do more to organize their provisions of post-graduate work, especially in social economics, Indian and colonial administration, and in the history of British education.

I cannot help feeling, too, that more might be done to facilitate, as has been already suggested, the interchange of teachers between American and English schools. Nothing gives so much insight into the real state of national education as an opportunity of teaching in a good school. Many of our best teachers would derive very great benefit from temporary service in an American school, and I am certain that the presence of clever American teachers in many of our English schools would have a most stimulating influence. It is, perhaps, worth consideration whether a small international committee could not be formed to register and advertise vacancies, to examine and report on the credentials of candidates and the status of the schools, to provide English and American candidates with the detailed guidance which they would require, and to facilitate their seeing, during their sojourn, a representative variety of typical schools.

We owe already a great debt to American influence in our English education. Your influence has been one of the most potent forces in destroying the baser forms of social prejudice in regard to education and to the opening of careers in life. The true feudalism expresses itself in terms of social duty and service. The baser form of feudalism expresses itself in terms of selfish social privilege.

Secondly, we are under heavy obligations to you for the influence of many of your great writers and students of education. New England has had a profound influence on English thinking, and of all the New England writers Emerson has meant the most to us. We students of education are constantly drawing suggestion and inspiration from the work of a multitude of American educators, but perhaps I may be allowed to say that we are especially indebted to the writings of Dr. Harris, of President Butler, of Dr. G. Stanley Hall, of President Eliot, of Dr. John Dewey; to the work of Teachers College and of the Chicago University School of Education, and to the periodical and other publications of your educational press.

Thirdly, we are learning from you the necessity of re-modeling much of our education in the light of modern needs and of the demands of applied science. We shall learn from you to do more in the way of leaving out the non-essentials. You are stirring us up. It is one of our characteristics (good or bad, according to circumstances) to "stay put."

It is no accident that we have thus learnt from you. In the deeper matters of life, kinship means a great deal. We seem to be drawing closer together. We differ in the form of our institutions, tho we both of us have a balance of freedom and authority in our national life. We differ in the nature of our political tasks, tho we are both coming to bear a part in the white man's burden. But we share three things — language, practical idealism, and the belief that the ideal of national life is to be reached, not in mechanical uniformity of state regulation, but in unity thru diversity.

These are things which it lies very near the central task of the schools to transmit from one generation to another. Is it too much to hope that, in years to come, not the United States and Great Britain alone, but all the great nations of the world will find themselves drawn more and more, thru union in common tasks and thru the wise influence of just teachers, into the spirit of truth, unity, and concord? That is our prayer; that is our brightest hope.

DEVOTION TO TRUTH: THE CHIEF VIRTUE OF THE TEACHER.

MOST REV. JOHN IRELAND, ARCHBISHOP OF ST. PAUL, ST. PAUL, MINN.

Were I to choose a device to adorn the class-room and inspire teacher and pupil, whether in lowliest rural school house or in stateliest university pile, it should be this: "Devotion to Truth, for Truth's own sake."

Devotion to truth is the prime condition of intellectual life and progress; it must be the dominating virtue in the work of the pupil whose mind is bidden to unfold beneath the sweet and penetrating light from Heaven's own skies, and yet more so in the work of the teacher whose task it is to turn this light in its full power and radiance toward the mind of a willing, but inexperienced, dependent.

I should say, too, devotion to truth for truth's own sake, with heart undivided, with intellect unbiased. Truth is a jealous and imperious queen; it has the right to be such, so rapturous its beauty, so sublime its majesty. Truth scorns the wooer whose proffer of homage is not plenary, and hides itself indignantly from his gaze.

What is truth? The brief, calm definition, given at first questioning by philosophy, is: Truth is that which is; truth is reality — reality in actual existence, reality in causes, reality in effects — the thing itself, whatever that thing be, completely and exactly as it is.

What is, is true; and what is, is good and beautiful. The three terms are substantially convertible: truth, goodness, and beauty.

The simplest definition given of truth secures to it our reverence and love, and tells the baseness, the sacrilege of that illusory phantasm which fain would put itself in the place of reality, which fain would distort or destroy reality, which has for name error or falsehood.

This is not all. Upon further questioning, philosophy soars into its highest altitudes, and there, speaking to us, it exclaims: Truth is divine; it is either God himself or the image and the work of God. Challenged we are to award to truth the devotion, I would say the worship, which is due to the eternal First Cause, the Infinite, the Omnipotent, the Omniscient; and rightfully are we so challenged.

Truth is that which is; truth is reality. But the plentitude of reality, and consequently of truth, is God's eternal, infinite essence. We recall the biblical words, God's own definition of Himself: "I am who am." What, then, is truth in its eminent entity but God, the Eternal, the Infinite?

God, being the First Cause, the Creator of all else that is, all else is the externalization of ideas eternally resplendent in his uncreated essence, and the effects, whether immediate or mediate of his omnipotence; and so, whatever else there is, it is and it is true so far, and so far only, as it mirrors the divine essence, and is that which God willed it to be. And thus truth is ever divine; in its eminent entity it is God himself; in tiniest form, it is, in the measure of its special entity, the image of God's eternal essence, and the fruit of his wisdom and power, being in itself truth only inasmuch as, when seen and judged by his supreme intellect, it is in conformity with its prototype within his essence and with the counsel of his will in its actualization.

Every being, from the smallest grain of sand on the seashore to the mightiest sun in the firmament, from the most diminutive insect to sovereign man, from all that is created to the Creator, is truth; every act going out from infinite God or finite creature, every fact or incident marking the flight of time since time began, is truth; and wherever truth is, the divine is there; and it is very religion to approach it with respect, and, in opening to it our mind, to bid it enter thither, in its native perfection, unaltered and undimmed.

In God and in man there is mind, the ability to know truth.

God, infinite mind, knows all truth; man, finite mind, knows truth partially; so far as man knows truth, so far is he nigh unto the infinite, partaking of the life, the beauty, and the power of the infinite.

As the bodily eye is made to see bodily things, so the mind is made to see truth. The mind lives of truth; it is dead when no truth comes to it; it is dying when false appearances, instead of realities, are set before it. With the avoidance of error it is freed from disease; with the increase of truth it grows in vigor and in power.

Truth is light, and light is the adornment, the beauty, of the mind. Every being, every fact that is truth is a ray shed upon the mind; and, as ray follows ray, as the slender streak first cleaving the darkness widens into sun-kissed horizons, the mind glows and is afire; it mirrors more and more the intellect of the infinite; it is ravishing of comeliness and splendor.

Truth begets strength in the mind. Every reality, which is seen and laid hold of by the mind, transmits to the mind its own force; and as the mind travels from reality to reality, absorbing force after force, it ascends in stature and mightiness, dominating the universe around it, making its owner, man, what God intended man to be, the sovereign of creation. The strength of the mind is strength to the whole man. All, indeed, in man is dependent upon the mind. The several energies in him, thru which he may work and conquer, are set in motion by his will. But the will of itself is blind; it sees not whither it should tend; it needs the light which comes from mind; and the more brilliant this light, the more far-reaching its diffusion, the more capable is the will to discover the pathways over which man's other energies may travel, the more ambitious is the will to issue words of command, and the more ready are the other energies to obey it.

The knowledge of truth is power; it is the condition of all movement, of all progress in the individual and in society. And hence it is that all communities that live and seek to go forward clamor for greater truth, and labor that knowledge of truth be co-extensive with their membership, and, at least here and there, rise upward into towering peaks whose summits may bask in the luster of truth's highest and most radiant suns.

The noblest and most sublime thing in creation is the human mind. It is the image of the highest attribute in God, the divine intelligence. Thru mind man is conscious of himself; he knows himself; he knows things outside of himself: ranging far and wide thru the universe, he grasps and appropriates to himself the truths that are within it; he rises far beyond the universe into the regions of ideas and principles; rising still higher he reposes upon the very bosom of the Infinite—the First Cause and the Final term, the Alpha and the Omega, from which all truths come and to which all truths lead, and there he enriches himself with the life, the knowledge, the grace, the power, which are God's. "O Lord our Lord," exclaims the Psalmist, "how admirable is Thy name in the whole earth! . . . . What is man that Thou art mindful of him. . . . . Thou hast crowned him with glory and honor: Thou hast set him over the work of thy hands . . . . O Lord, our Lord, how admirable is Thy name in the whole earth?" It was the mind which is in man that the Psalmist was contemplating while he uttered his hymn of praise.

Does not the human mind compel our respect? Does it not, by its capability of beauty, of grandeur, of power, demand from us the homage that we open its portals to that, and to that only, which is for it beauty, grandeur, and power — to truth, and to truth only? To draw darkening clouds around it while it craves for purest light, to proffer to it vilest husks while it hungers for the food of God's skies, to put before it error and falsehood, instead of truth, truth whole and entire in its unpolluted virginal radiance, is treason and sacrilege.

Be it the device of the class-room: be it the religion of all sanctuaries of learning: be it the inspiration of the teacher as he gives guidance to the pupil, and of the pupil as he questions the teacher: "Devotion to Truth for Truth's own sake."

What in regard to truth is in every man a sacred duty appeals with singular emphasis to the conscience of the teacher. For the teacher is by profession the apostle of truth and the guardian of the human mind. The dignity of the teacher! I say it, when I recall that the subject-matter of his labors is truth, that the purpose of his labors is the introduction of truth into the human mind and, as a consequence, the exaltation of the soul of man into the regions of the divine. The dignity of the teacher! I say it, when I recall that the search of truth is the search of the divine, that the search of truth is an act of religion. The profession of teaching is the priesthood of truth; where the teacher speaks there is a sanctuary — the sanctuary of truth; and the sense of the Divine should permeate the atmosphere.

It was the great thinker of France, Joubert, who wrote: "Study the sciences in the light of truth, that is, as before God; for their business is to show the truth, that is to say, God everywhere. Write nothing, say nothing, think nothing that you cannot believe to be true before God."

Words sweet and beautiful, those of Joubert! They explain and confirm the device: "Devotion to Truth, for Truth's own sake."

Is there need that I urge faithfulness to truth. Is not truth at all times sought out and revered, as it deserves to be? Do not its native charms suffice to open every pathway to its advance, to remove whatever obstacles might retard its march?

We have but to cast a quick glance over the world of letters and speech to be satisfied that to truth its rights are not seldom denied, that not seldom, where truth should be supreme, error and falsehood prevail.

Truth has enemies. At times it is the inertia of mind and will which recede before the effort that genuine devotion to truth makes necessary; at times it is prejudice; at times, again, it is passion — pride, anger, self-interest.

Frequently truth retires to a distance; it delights, as it were, to hide from its suitor, and to surrender only to toil and patience. It is not truth; it is error calling itself truth that they lay hold of who would conquer at first sight, whom indolence impels to quick retreat.

It is proposed to study a foreign country. A few months, a few weeks are made to suffice, the greater part of the time being spent in hotels, which in no manner are representative of local thought or custom, whose ciceroni are especially trained to say and show what may flatter the national pride and prejudices of guests. Nevertheless, the volume is published, portraying the whole life of a nation, its moral and intellectual conditions, its religion and its politics, its commerce and its industry, concluding with most assured predictions of its approaching rise or fall, and with abstruse philosophical disquisitions on nations and races in general.

A book, bearing the name of a *litterateur* of fame, written to describe America and its people, is today widely read in Europe. The writer spent in America eight months—five of them in a charming winter resort in the heart of Georgia, and one amid the bustle and fashion of Newport: what could he know of America as it is and as we expect it to be? Many are the books read in America, written to describe countries foreign to us, whose authors spent far less time in those countries than Paul Bourget did in America, and without the cosmopolitan information and the keenness of intellectual insight which characterize Paul Bourget.

Monsieur Bourget's candor of spirit led him not long ago to entitle a book, which he had written as an account of a very rapid journey thru Italy, *Sensations from Italy.*

History, the material from which is woven so largely the texture of our thoughts and of our philosophy of life, is very often gathered from the mere surface of things. What was said by writers of yesterday is repeated by writers of today, as what had been said at an earlier date was repeated by writers of yesterday. And readers, unfortunately, are inclined to give their faith to the volume which first falls into their hands. Frequently the sources of our historical store are second-hand statements, and, in this manner, egregious historic falsehoods can be pointed out that pass down thru many generations, doing vast injustice, not only to individual names, but to whole nations and whole races. What should be done for history is to go deeply into first sources, study each question in the light of the epoch, more or less remote, to which it originally belongs, by impartial investigation of contemporary documents of whatever nature these be; or, if this is impossible for certain ones among us, to seek out, as far as we may, writers who have gone to first sources and who are noted for their fairmindedness; and, in controverted matters, to give an attentive hearing to witnesses on both sides in the dispute.

In late years there is visible a wondrous improvement in the study of history, for which the worshipers at the shrine of truth cannot but be most grateful. No one is today reputed a worthy historian who has not gone, in a most patient and laborious manner, to first sources. Luster of name, literary beauty of style win no confidence, if proofs are not given of sound erudition and absolute honesty of purpose. Facts are in demand,

and facts must be offered, or the volume is ruthlessly set aside. National governments honor themselves by lending aid in this search for facts. Their secret archives are opened to investigation, and their treasures, hidden for ages on dusty shelves, are printed for public use, usually at the expense of governments themselves. In this instance I take pride in recalling the act of Leo XIII. twenty years ago, in giving to all inquirers free and facile access to the archives of the Vatican palace, to which there repaired in ages gone by, more than to any other center of action, the records of the plannings and doings of Christendom. But why should not governments, whether of spiritual or of temporal polities, be ever ready to enlighten the world on the happenings of the past? Governments, or powers whatever, afraid of truth, are doomed: for truth crushed and silenced today will rise and speak tomorrow, so surely as the God of truth reigns. "Truth is mighty, and it will prevail."

Then, if we are earnest seekers of truth, caution must be taken, lest our judgment be warped by prejudices—opinions previously formed on grounds that are irrational. Says Sir William Hamilton, making the words of another writer his own:

> There is no one who has not grown up under a load of beliefs—beliefs which he owes to the accidents of country and family, to the books he has read, to the society he has frequented, to the education he has received, and, in general, to the circumstances which have occurred in the formation of his intellectual and moral habits. These beliefs may be true, or they may be false, or, what is more probable, they may be a medley of truths and errors. It is, however, under their influence that he studies, and through them, as through a prism, that he views and judges the objects of knowledge. Everything is therefore seen by him in false colors, and in distorted relations. And this is the reason why philosophy, as the science of truth, requires a renunciation of prejudices, that is, conclusions formed without a previous examination of their grounds.

It is necessary, indeed, in view of the situation in which is cast the child, or the adult even—and there is no reason why we should deplore the fact—that very much of our judgments and opinions come from our surroundings, such as we find them; and it were fatal to proper intellectual life were we to preach universal and instantaneous rejection of all beliefs which we have not subjected to previous examination. But what, on the other hand, would be equally fatal and still more unreasonable, would be to hold fast to what we once had heard or believed, without allowing ourselves to imagine that truth may lie in statements now coming to us as new, and without giving to such statements the attention which the manner of their presentation, or the gravity of the matters upon which they bear, seem to warrant. How much we have had to revise in our scientific and historic judgments! How much, we are daily made aware, we must revise in our opinions of men, and of institutions, when these come to be thoroly known by us! Readiness to accept truth, whencesoever it comes, courage to set all else aside rather than reject it, is the proper disposition of the really rational mind and the really sincere heart. And this disposition, of course, is all the more needed, and all the more commanded in the teacher—be this teacher he who instructs in the class room youthful listeners, or he who thru tongue or pen influences the thoughts of a whole community. The words of Paul have a philosophical as well as a theological application: "Prove all things: hold fast that which is good." Until we have heard those who differ from us, or who bring to us a message that is new, and weighed their arguments, we have no right to scorn their opinions; the mere fact that we hold other opinions, into the grounds of which we have not seriously peered, should be no justification of our contempt or indifference.

How much there frequently is of prejudice in the judgments of one people regarding another, of the adherents of one religious creed regarding those of another! How much harm there thence follows, not only in the interests of truth, but in those of social peace, and of the bonds of friendly amity that should bind together all the members of the human family!

Prejudice usually springs from narrow-mindedness. Its victims are men who, from very lack of mental vision, cannot see things that are at all outside the periphery of their own little circle of thought. They are to be pitied rather than blamed; invincible ignorance gains for them our indulgence.

But not with equal leniency are we allowed to treat other enemies of truth—those whom passion dominates. There are those whose pride is wounded by truth: whose profit it is to combat it. An opponent must be broken down; a cause, in the success of which we see a coveted prize, must be upheld. What then? The appeal is to sophistry and calumny; all that favors the antagonist is kept out of sight; all that damages him is brought into evidence; facts and arguments are distorted; motives are misconstrued; direct falsehoods are uttered. By dint of arguing, one so blinds himself at times that injustice is seen as justice and is championed as justice; one's chosen side must be defended, and it is defended, whatever the means—as it was said of old, *per fas et nefas.*

You remember the hero of Goldsmith's rustic school:

> In arguing, too, the pastor owned his skill:
> For e'en though vanquished, he could argue still.

You can remember, also, many disputes among neighbors and associates, sometimes more or less jocose, sometimes growing into bitter feuds—all the results of false reasoning prompted by pride and imaginarv self-interest. Those, the more innocent forms of the evil, that I deplore.

There are other forms of this evil, which drive back into long oblivion truths vital to the welfare of humanity, which lead to bloody contests, even to war between nations.

I am one of those who see in the sequence of the late Spanish-American war the guiding hand of a mighty Providence, and the outburst of forces long gathering in the bosom of the nation, sure, at one moment or another, to break out in resistless self-assertion.. Nevertheless, I shall never deny that among the immediate causes of the war there are to be numbered the exaggerated statements, the lies, too, and the calumnies, the ceaseless appeals to wild and reckless passion which disfigured and disgraced the utterances of certain newspaper writers and of certain other manipulators of public opinion. I know for a fact that the instructions going from the office of a certain newspaper to its European correspondent read this wise: "Wire all that makes for war, nothing that tends to prevent or delay it." Grave, indeed, were the causes, demanding from America a solemn act; strong were the provocations given to ruffle the national temper; yet we can never approve methods in which falsehood and passion play a large part; and we cannot but assert that it were immensely better for the country if results attained thru war could have been reached by other and less direful means.

How unguarded and reckless, and how reprehensible are many of the statements published at the present time, as from the Philippine Islands, purporting to tell of dreadful deeds of cruelty and of injustice, for which on close examination no foundation in fact is found! I shall name in this connection one instance, which I am particularly pleased to censure. A little while ago certain Catholic newspapers raised the high cry, that proselytism was the order of the day in the schools of Manila; the chief officials in the Department of Instruction, it was said, and the teachers in the Normal being regularly ordained ministers, who divided their time between the multiplication table and tract reading. The matter was investigated, and it was discovered that the chief officials and the teachers in the Normal were not ministers, and that their own good sense, as well as the strict rules of the government, confined them strictly to secular matters. The newspapers that had admitted into their columns such statements have since, indeed, repudiated them; but, meanwhile, much needless excitement was raised and much harm was done.

If I were to choose where, outside the class-room, for the general welfare of humanity I should have devotion to truth prevail, I should name the newspaper. The newspaper is today pre-eminently the mentor of the people. It is read by all; it is believed nearly by all. Its influence is paramount; its responsibility is tremendous. Its province is to narrate facts — to give the truth, nothing but the truth, and all the truth — to allow both parties to a controversy to be heard; never to palliate or distort; to omit nothing when that which is omitted may be of relevancy in the formation of public opinion; never to publish the doubtful as certain, the mere gossip as well-ascertained news; never, above all else, to put before readers error and falsehood. Facts given, the editor is at liberty to argue from them in favor of his own tenets; but, even then, thru limpid lines, there should appear radiant the fair love of truth, never the mere wish to extol party or sect. Journalism that is honest and honorable is one of the nation's most precious inheritances; that which places notoriety and pelf above truth and virtue, and adopts as its tactics of war the stunning sensation rather than the calm statement of facts, is one of the nation's direst calamities. Numerous in America is the journalism that is honest and honorable; now and then is found that which worships, above all else, notoriety and pelf. There is here a duty of conscience and of patriotism for Americans; may they be ever mindful of that duty!

There is a sphere where, if anywhere, thought should be most serene and heart should be kindest; and even here passion fears not to lower its wings of harpy. It is the sphere of religion.

The *odium theologicum*—the most baleful of hatreds—the sternest foe of truth!

Religion is but another name for peace—the peace sung at the birth of Christ in Bethlehem: "Glory to God in the highest, and peace to men of good will." And yet, in religion's name how often families and communities have been divided, whole nations driven into bloody warfare! In religion's name how often such passions are awakened that the pursuit of religious truth is made absolutely impossible.

This is what happens in religious controversies. We refuse to hear the other side. We are convinced beforehand that we understand our opponents better than they understand themselves; and that the dispute must be waged on our statement of the case. Then we mistrust and misconstrue their motives; *a priori* they are the unjust, and we are the just; they have no truth, and we have all truth. Why, I ask, should it be thus? Why not assume that others are as honest as we are, and obey their consciences as we think we are obeying ours? And why not always, before we decide one way or another, bid our opponents give us their statement of the case, instead of taking as the exclusive ground of our judgment our own statement or one received from those who are noted as partisans of our own opinions? With precautions of this kind, such as simplest justice should ever make imperative, we could argue with a degree of reverence for our intellect, and, before we finished, we should most likely have discovered that at least there is something to be said on either side, and that there is between us and our opponents much common ground, upon which to labor for the common good, in peace and in love, and with due respect for the consciences even of those from whose principles we may otherwise believe ourselves obliged to differ.

Truth is impregnable; it is the reality of things; nought can alter it, nought remove it. Those who know truth partake of its security, and have no fear for it or for themselves. They confide in its beauty and justice, and scorn other methods of defense. They who lend themselves to passion, who expose themselves to the peril of irrational or unfair warfare, make confession of the weakness of their position.

Truth and its friends are patient: the future belongs to them. Today it may be only as the weak dawning of the early sun thru clouded skies; but it will grow in splendor, it will rise high in the heavens, brightening even the surrounding clouds, dispelling them with its light and heat: "Truth is mighty, and it will prevail."

And why do I talk before a convention of America's teachers of the perils that crowd the pathways to truth? Do I not know, beyond a doubt, my hearers' sincere love for truth, and the noble sacrifices they make in the pursuit of it? All this I do know; and for all this I praise America's teachers. But I have in mind to lay deepest stress upon the importance of truth, that utmost care be taken by them to instill into the souls of their pupils their own love of truth, their own devotion to it.

Truth is not always loved and served, as it should be, in the world around us. How shall it be in the world of tomorrow? The classroom of today is to be the world of tomorrow. Into whatever the children of today are fashioned in mind and in heart, that will the men and women of tomorrow be. And the children of today are fashioned in mind and in heart by the teachers present or represented in this assembly. Each pupil is the Parian marble, now rough-hewn and unformed. Every word, every act of the teacher is as the stroke of the chisel falling upon this animate block, to reveal in it the glory of the angel. No Michel Angelo had ever vocation so noble, so blessed, as the instructor of the youthful soul. Let the teacher do well his duty; let the pupil be properly formed, and great will be the America of tomorrow, devoted will it be to truth.

Teach, I pray you, to your pupils the love of truth; extol before them its beauty; obtain that they make consecration of themselves before its shrine. Tell them that their souls are noble and grand only when no clouds of error hover over them, only when truth in its plenary objectivity is so fully reproduced in their minds that those minds are transfigured in the beauty of truth, and are, as it were, in themselves truth. And tell them that the truth which is in their minds must be the adornment of their lips when those lips part in speech, the adornment of their pen when that pen moves in writing; teach them that the lie spoken or written is yet more baleful and more inglorious than the lie ensconced in the mind; for from lips or pen it goes out to darken and pervert the minds of others.

I said that truth is divine, that truth, in a very real manner, is God. When God in human form walked upon earth, he was seen of men as "full of grace and of truth;" He said of himself: "I am the way, the truth, and the life;" and, announcing the fruits of his coming, he said to his followers: "Ye shall know the truth, and the truth shall make ye free." Christ was in all things, and before all else, truth; no better manifestation could there have been of the divinity within him.

Let us, in imitation of Christ, be true. His prayer for us to the Father was: "That they be sanctified thru truth." The intellectual grasp of the truth will not suffice unto full sanctification; there must be, too, the grasp of truth by the heart, the active union of the heart with truth. But so potent is truth, that, once thoroly possessed by the mind, it easily makes its way into the heart—"The truth will make ye free." It might be said that Christ's words bore more directly on such truth as reveals immediately divine life in the soul; I fear not to say, they bore on all truth; for all form of truth is akin to every other form, the spirit of one being that of the other, the essence of all being the eternal prototype in the divine entity itself. Moreover, the soul attuned to truth in any form will pursue it under all forms; and, even if after due labor it reaches not unto all truth, it will at least be in its affections truth-like and worthy to possess all truth in heaven. Let truth be in smallest pebble, in tiniest herb, in mightiest star, on earth or in the firmament, or in the highest heavens above earth and firmament; it is everywhere divine, it is God-like, and God-like who seek it, know it, and love it.

THE EDUCATION OF THE AMERICAN FARMER

HON. JAMES WILSON, UNITED STATES SECRETARY OF AGRICULTURE,
WASHINGTON, D. C.

I bring to you today the cause of the farmers of our country—the creators of wealth, the foundation on which society rests; the conservative class that work in the sunlight thru long days, keep level heads when others are excited, pay taxes, and reinforce all other classes when they wear out.

Our country has grown great among the peoples of the earth because of industrial activity brought about by the high average intelligence of Americans.

The world has never seen such vigorous competition for commercial supremacy as exists at the present time. The teacher is called upon to strengthen commercial lines, so that the highest intelligence shall guide and direct the movement and interchange of commodities. The manufacturer has come to the front in competition with the world and challenges the position of artisans, long masters of the secrets of changing raw materials into products of skill.

The teacher is helping to prepare the manufacturer for this world's contest, and millions are being given by philanthropists to endow technological institutions to train the man who works in the shop. We have the best system of transportation in all respects of any people. The companies educate their men by precept and example, applying every scientific discovery and invention and the results of all experience and observation to the carrying of freight and passengers. The railroad man is a specialist of the strictest order, and learns how to do things by doing them, taking nothing for granted into which he can inquire, nor resting satisfied with anything he can improve. The teacher intervenes in this great industry to furnish forth the experts who direct these great systems that shorten time and space and contribute so much to our success and comfort. This may be said of our people in all the different lines of activity in which they are engaged—they are educated toward their life-work.

Our earliest colleges were organized to teach theologians; the oldest schools were instituted to teach the people to read, write, and cipher. Both college and school have extended their courses of study, but neither has greatly extended the original purpose of its creation.

Our common-school system has so long been the best devised by man that the average intelligence of our people is much higher than any other. Our school system reaches all the people, our colleges educate the few. We have adopted much in our systems of education from peoples who have not our responsibilities, peoples who educate men of leisure, fashion, class, privilege, caste, birth, and all that. The people govern here. They should be educated with a view to their development along the lines of their life-work, whatever that may be.

The problem of educating the producers of wealth presents itself with much force at the present time. The world is small, and its ends seem to come nearer together as invention and enterprise shorten travel and the cost of it, bringing into active competition in the race of life the workers in the fields of all lands.

What can be done for our producers that they may live on higher levels of comfort and happiness, that they may help the weary hand with a better-trained head, and have more time to devote to intellectual, moral, and spiritual life, is the previous question which the educators of the great producing states of our country are called upon to answer.

The four-year college course does not begin soon enough, nor continue long enough, to meet the requirements of our day in this regard. Teachers are wanted in primary and secondary schools and in post-graduate work in the university. They are wanted to do work that has not been done in all the ages, the discovery of truths underlying production and their application to the farm.

Let us see how our professional men and our best equipped educators are prepared for their life-work. They attend primary, graded, and training schools until they are fitted for college; after the bachelor's degree is wrested from the faculty with much tribulation and some vexation of spirit on both sides, post-graduate work at home or abroad for the future teacher is the common road to be traveled. The professional enters upon special study, longer or shorter, and finally teacher and professional begin practice on people's minds, or bodies, or souls, or teeth, or misunderstandings, as the case may be. Our educated men travel this road—nearly all of them; it is a long study from youth to early manhood or womanhood, without intermission — this preparing for professional life-work. It answers a good purpose; it is perfected for those who need it, but it is not sufficient for the farmer.

There are self-made men who become strong in certain lines without university training. but rarely in more than one line. The West nurtured many of these unique characters thru its vigorous ways of object-lesson teaching, but western conditions are changing. The prairie grass, the wild flowers, the fierce winds and bad roads, the privations, and the neighborliness among the people are going with the grand men and women they inspired; and, with them, much self-reliance and individuality.

I would not advise young people to avoid our regular channels of learning and depend upon self-development. They would graduate late in life. The education of the youth who is to work in the fields, grow plants, and rear animals cannot be pursued as the professional prepares for future usefulness. He attends the district school, secondary schools, or the upper grades of our high schools; but they lead to literary or professional studies. Is there a way by which we can enrich primary education with agricultural studies, so that the farmers' boys and girls may have their vision strengthened to see, on clear days, the delectable mountains of an educated farmer's life, towering in the distance as high as other elevations ?

The most useful and valuable educational work in all the world appealing to the educator is that of the farmers of the country. Pioneer work along this line is waiting. The organization of faculties to do the work; apparatus, laboratories, text-books, illustrative material from primary to post-graduate and beyond, where studies of specialities must be combined, where research must be broadened, and where specialists must be grouped to reach a desired end and meet the pressing demands of producers — all these are waiting. This is the great field of applied science, where the grower seeks the help of the scholar, of the experimenter, and of the observer. The millions of farmers look to you for help in these directions.

The learned professions, so-called, with commerce, manufacturing, transportation, mining, lumbering and the like, have invited young men to neglect the study of the sciences that relate to production ; but education has been overdone in several of those lines, and the supply exceeds the demand. The average mechanic earns more than the average professional. The farmers are being educated, but the studies that are offered by most educational institutions are not what the producer from the soil requires. He goes to the warehouse to buy, and must be contented with what he can get. His interests require him to prepare himself for doing one thing, and his training prepares him to do another ; he needs garments to answer in one kind of work and finds little or nothing for sale in his line, so he puts on what is designed for something different or designed for mere show. The acquirements of literary and professional men would be only ornamental to the farmer if he acquires nothing else. They are more ornamental than useful to many who rejoice in them in our day. There is a pernicious idea abroad among old-time educators that one educational system is a sufficient foundation for future usefulness in all walks of life, and specialization should take place only after that foundation is laid. We find, in preparing scientists for our work in the Department of Agriculture, that no one specialty is sufficient for him whose life-work it is to study soils and their composition, climate and its effects, moisture and its potentialities, animals and their uses, insect enemies and friends, the microscopic plants and animals and their influences, the economic growth and disposition of crops, and the like. These are all specialties, to the study of each of which a scientist might devote a lifetime, but concerning which the farmer should have thoro information to manage his affairs intelligently. Life is too short to make acquaintance with these sciences after going thru primary schools, secondary schools, and colleges, and attaining manhood with no knowledge of them. Their study should begin with the primary and continue thru life; then the country will have farmers who will get response from the soil.

To bring this about, to organize, inspire, and develop the farmer for his work when necessity calls upon him to assume its burden, is the work of the educator, and you should begin with the child in the primary school; and that you may do this, the state should give you facilities to prepare for this work.

The Department of Agriculture is educating 260 young men and women in these sciences at the present time, because the colleges and universities have not trained them in the sciences relating to agriculture. Our scientists should devote their time to research in co-operation with state institutions, and this they do as far as practicable in every state and territory and in the isles of the sea under our flag, but we must educate assistants in all lines. I find fault with no system of education in operation for the benefit of any class of men. I assert that systems in vogue are not suitable for farmers, because they do nothing, comparatively, to make them use their heads to help their hands when the hands must lift the burden. I am not content to have the husbandman ignorant of the truths of nature; I am not content to have the American farmer remain as ignorant of the sciences that relate to his lifework as the European farmers are; I protest against conditions continuing that give grounds for tracing relationship between the farmer and the ox. A thoro study of applied science and modern languages will develop the mind sufficiently for all practical purposes. You will find that the student will acquire any modern language that will help him in the discovery of truth written in a foreign vernacular, and it will be the same with regard to other studies that will help the toiler in the field; but let the necessity for every acquirement be apparent before the pupil is required to engage in it. The man who lives by the soil will only devote time to acquiring the useful.

The highest aim of the educator should be to educate the people, and all of them, along lines of greatest usefulness to them and the commonwealth. The farm is the fallow ground, the neglected outfield, the unworked claim, the promising subject that will yield the best returns on the investment.

I speak of the class that cannot afford an ornamental education and will not have it. In the methods of all farm operations we are in the lead of foreign farmers, thru the efforts of the farmers themselves to learn of their own affairs as best they may. We are taking the lead in research after scientific truth, and have no veneration for the borrowed educational systems of the old world. Our American carriers excel, our American mechanics excel, our American miners excel, our American manufacturers excel, our systems of government excel. Why should not our systems of education excel also, especially for the creators of wealth, who never have had a university adapted to their wants, nor even a college, until within the memory of men still in the prime of manhood?

Foreign countries are looking to the United States for educators along these lines. Owners of land properties are inquiring for trained agriculturists at home and abroad. The state colleges and experiment stations inquire for masters in agricultural science to teach and investigate. Every farm that is being robbed of plant food is crying aloud for better treatment. The vanishing forests distress us with their dying wails, drouth-stricken fields admonish us, inferior animals advertise that the farmer's education has been overlooked. The United States Department of Agriculture, the agricultural colleges, the state experiment stations, the high schools of agriculture, agricultural societies, the agricultural press, authors of books on agriculture—all require help in higher education, while the specialist needs facilities to expand into kindred specialties to fit himself for doing some simple thing that has never been done before, to help some producer in wresting from nature some truth that has been hidden in all the past.

The American people always find the right man to meet the emergency. We want a man now to organize the education of half the people under our flag, who till the soil and furnish 65 per cent. of our exports, who create the wealth of the country from materials found in earth and air and water; we want organization from the primary school to the university and beyond, into fields where things grow; into the stable and yard thru which crops go to market; into the farm factory, where skill should add to value; into the pasture, where skill should direct form, feature, and development; into cultivation, where science should defy drouth and deluge; into fertilization, where observation and experience must be supplemented by education regarding soils and their composition.

The American farmer is waiting and watching for the coming of this man. Are we to look for him in some one of the half-dozen institutions that are doing promising work, or will help come from as many sources, and a highway be constructed by several men who realize the needs of our country in this regard? We will look for the coming man in some state where the people see the wisdom of strengthening the producer and admonish their representatives to that effect; where boards of control appreciate the value of this work and apply endowments of state and nation to their legitimate uses.

Five thousand students attend agricultural colleges, but these colleges are feeling their way in the dark along untraveled paths. They are fitting and trying, as carpenters built barns in old times; they will at last forge out a system, by comparing notes, that will meet the requirements of producers and be entirely new and suitable to our conditions as a people.

The farmers of this country asked for and secured the endowments of 1862 for agricultural colleges for the several states and territories, and supposed that nothing more was to be done. They did not consider how students should be prepared for colleges, nor what they should do after commencement. They forgot to ask where teachers would come from who would be competent to apply science to the farmer's work. How few teachers the world possesses! It is interesting to look back over the intervening forty years and see the things done and left undone by these colleges. How grandly some of them have overcome obstacles, and how very little others have done! They have had no university to guide them. They have run like wild trains without a time table, and some of them have used for other purposes the money Congress gave to educate the farmers. Boards of trustees and faculties, who would under no circumstances break the laws of God or man, do not hesitate a moment to substitute students in something else than the sciences relating to agriculture. Less and less of this is being done, however. The wonder grows that such far-reaching interests have not had well-defined educational facilities along every special line. Look at the array and consider the want of exact information regarding them. Soils, buildings, grasses, grains, farm animals, fibers, forests, fruits and vegetables, twenty-five billions of dollars in value. The time has fully come when educational institutions, especially in an agricultural, mining, or manufacturing state, should apply science to industry, and to this end the faculty should be constructed.

My highest conception of duty when I went to Washington was to help to strengthen the state institutions along lines of agricultural education and research. I am still of that opinion, but I found it necessary to first strengthen the scientists of the department by better facilities, apparatus, assistants, salaries, selections from outside, and education within. Some progress is being made along all these lines. State and other institutions and foreign countries are calling on us for strong men. The whole column is marching toward the position of placing our country in the front rank of producers of everything that contributes to the happiness of mankind.

I look to the educators of our country to take into consideration the producing half of the people under our flag. There is good work being done in the Missouri University toward introducing the elements of agricultural science into common and secondary schools, by holding a summer school for the education of the teachers of these schools. This is the place to begin. The average American is the product of the common school. The stream does not rise higher than its source. The teacher should have facilities to learn along these lines at the expense of the state. The faculty of the agricultural college of the state is the repository of this information, and the teachers should have their expenses paid while they are becoming possessed of it.

We need text-books regarding agricultural studies that can now be compiled from work already done by the nation and the states.

The Canadians have taken up the work of educating their teachers by grouping the schools and sending instructors to each group. The British government has been trying to educate the parochial school-teachers, but the scope of instruction is limited. Something has been done by several institutions thru university extension work in our own country. Alabama gives $2,500 annually to support a school of agriculture in each congressional district in that state, with a view to making them feeders for their own agricultural college. Minnesota has an admirable school of agriculture, and Nebraska is well along in the work of organizing one. Wisconsin has taken the lead in the organization of short courses that will no doubt become feeders of the agricultural college. Iowa excels in animal husbandry among other things. Several of the states have well-organized and growing colleges that hold out hope of good things in the future, and several states divert the money given by Congress for the education of the farmer to education along other lines. But progress is being made in most states, the tillers of the soil are appreciating what has been done, and will not rest content until well-equipped faculties are organized in every state and territory of the Union.

We find that progress is being made toward the education of the farmer; that belief is extending regarding its necessity; that opposition is vanishing among educators whose studies did not include the science of the farm; that demand for instructors and organizers along these lines is growing; that, as a nation, our power for good at home and abroad depends upon the education of all our citizens; and that all classes, kindreds, tongues, and peoples look to you, the educators of America, to lift the whole up to higher intellectual and moral altitudes.

THE HOME AND THE HIGHER EDUCATION

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Within a few days there have been graduated from our colleges and universities an estimate of between four and five thousands of young women. The fact represents the fruit of a half century of earnest and intelligent agitation in behalf of the right of women to receive the higher education and the duty of the public to provide means whereby that education may be acquired. College women are now far too numerous to be regarded as an innovation, and their achievements have been too important to consider them longer as an experiment; yet there is evidence in plenty that the college woman, her present sphere, and her future destiny still furnish a problem which vexes the spirit of many a skeptic. Within the year, if the increased number and the character of contributions upon the subject to our periodical literature is a safe criterion of public opinion, there has been a recent re-opening of the old question. The discussion, however, is upon entirely new and certainly unexpected ground. The subtle ridicule which attended the advent of the college woman has given way to cordial approval, and the world's conversion to the college woman's right to exist seems complete.

When college women were yet rare in this country, a German professor was told that an American woman had written the best answer ever made to Edwards' "On the Will." In horror-stricken tones he exclaimed in reply: "Then may Heaven forgive Christopher Columbus for having discovered America." That man represented a type common in his day, in our own country as well as in Germany. Unreasoning and intolerant as was their attitude of mind, their opposition was founded upon honest doubt. The conversion of intolerance into tolerance, of ridicule into applause, is due to the fact that these doubts have been forever quieted by the indisputable demonstration of the fallacy of the four chief claims of the opposition.

1. Women are mentally capable of grasping a college education, and a great many women are more capable of doing so than a great many men.
2. Women are physically able to bear the continued strain of a college course, and many of them are far better able to bear it than many men.
3. The college woman has no more lost the "eternal womanly" than the college man has lost the "eternal manly" in the struggle for education.
4. College women, like college men, have not lost their ability and desire to become homemakers, nor their willingness to obey the second law of nature, "the preservation of the species."

This demonstration seems to have been generally accepted among the educated as final. The new discussion does not dispute the right of women to receive the higher education, nor deny their ability to grasp it; nor does it seriously question the beneficial effect of the higher education upon women themselves nor upon the homes over which they preside. In fact, the new criticism represents an entire turning of the tables. The whole spirit of it seems to have been inspired by a belief that in some mysterious way men are being defrauded of their rightful prerogatives by the co-educational college women. For fifty years the extension of educational privileges to women has been a concession to the plea for the rights of women; the new question has been raised in defense of the rights of men. An impetus was undoubtedly given to the new line of thought when, in 1898, W. T. Harris, Commissioner of Education, made the prediction that if women students at colleges should continue to increase as rapidly, in proportion to men students, as they had done in the past, it would not be many years before there would be more women than men in our colleges. Following this announcement, the figures of the Commissioner's report of 1900 may have seemed ominous to those who had regarded the college woman as a negative rather than a positive factor of society. In the years between 1890 and 1900 men students in colleges increased 60.6 per cent., while women students increased 148.7 per cent. These facts have evidently frightened the conservative, and have aroused a cautious but firm opposition to co-education. The discussion has assumed sufficient importance to alarm many women who fear that the advantages won after years of serious struggle may be lost; and to lead at least three great daily newspapers to predict, editorially, that co-education will be replaced ere long by the separate school. Three incidents have wielded a somewhat potent influence in the discussion. The first was the action taken by Adelbert College, of Cleveland, which closed its doors to women in 1888, after fifteen years' experience in co-education. The college is not of sufficient importance in itself to have added any particular weight to the discussion, had it not been for the significance of the cause which led to its act. If reports given by those who claim to know are correct, the women students were in no wise blamable for the step. Their absences from college exercises on account of sickness averaged less than half as many as those of men; their average scholarship was creditable, and during the fifteen years they had won a majority of the honors of the school. It was alleged, however, that this condition was a dangerous one, and, should women increase in numbers and improve in standing as rapidly as they had done in the past, men might prefer other schools. Women, therefore, lost their privileges at Adelbert College, not on account of their failures, as would once have been dismally prophesied, but because of their superiority. The second incident, which is of far more serious moment, since it occurred in the West, which has been regarded as the stronghold of co-education, was the action taken by Stanford University to limit the number of women students, while the number of men students should remain unlimited. The excuse offered is the same as that given by Adelbert, that is, the possibility that women would outnumber men if the present rate of increase should continue. The third was the remarkable address of President James, in which he said: "In Northwestern University women have increased faster than men, and if the same increase continues, in ten years women will form half the student body, a condition which many friends of the University would view with concern." In this connection it is interesting to note that in the commencements of this year Cornell University graduated a class of 190 students, 75 of whom were women; Michigan University graduated 261 students, of whom 115 were women.

It is probable that the rather discourteous conduct of men students in the Chicago University toward the women students in connection with the convocation exercises, and the position taken by the men of Columbia University concerning the use of the campus and baths by the students of Barnard College, may have added force to the opinion that men students in all colleges would be glad to be rid of the presence of the women students. The very recent action of the Chicago University, in segregating the women from the men in the freshmen and sophomore classes, inexplicable by any other theory than that it has been a concession made to the ungallant protests of the men undergraduates, will probably strengthen this point of view. The fact that girls graduate from our grammar and high schools in considerably greater numbers than boys, and the even more significant fact that men in our nation now carry a larger per cent. of illiteracy than women, may have added to the general alarm of conservatives.

Denuded of meaningless platitudes, the opinions expressed seem to resolve themselves into a fear that a struggle for the "survival of the fittest" is going on in our educational institutions, from the lowest to the highest, with an alarming possibility that women may gain the final supremacy.

To my mind co-education will suffer little from the present flurry of opposition. The system is founded upon claims too broad, too sound, and too progressive to be dislodged without serious and fair reasons; and certainly the objections thus far offered can hardly be considered as either logical or compatible with "fair play."

Nevertheless, the position taken by these new opponents of co-education is worthy of analytical investigation. Why should the friends of any university "view with concern" the fact that half, or even more than half, its students are women? Is it because the scholarship of the women has fallen below that of men? No one claims it. Is it because they have in any way failed to meet the demands of college life? No such suggestion has been made.

Reducing the statements made, within the year, to their very lowest denomination, they become simply this: the work of the world has been assigned to men, and the work of the home to women. Man's work is of more importance in public estimate than the work of women. Therefore, if either is to have superior training or superior advantage, it must be men, since the achievements of men accrue more largely to the credit of the college. So, these college men would turn women out of the co-educational schools because in their opinions their work in after-life is not likely to be equal in value to the work of the men graduates. They do not pause to ask why their work is not equal to that of men, or whether it may not be made so.

Despite the common allusions to the sacredness of home and the nobility of motherhood, it is evident these functions are not in reality regarded as equal in importance to those accorded to men. One needs only to turn to commencement orations and baccalaureate sermons to be postively assured of this fact. In a careful perusal of a number of those delivered this year in co-educational colleges, I have failed to discover a single reference to the future of the women students. These orations have recounted in elegant terms the opportunity offered in American life for the services of the "scholar in politics," and for the college man in affairs; they have painted in glowing colors the fame and fortune and satisfaction of the educated expert in great enterprises; they have reviewed the problems which hang unsolved over the heads of our people, and in earnest appeal have urged the college man to consider them well and, having considered, to speak and to act. Each address seemed redolent with the very "joy of achievement." One may well imagine the thousands of young men, with intellects trained to fullest vigor and bodies developed to enduring strength, barely able to sit in patience to the end, so anxious might they well have been, when thrilled by such promises of conquest, to gird on their armor and to go forth to claim their destiny. But no word of advice, no inspiration to endeavor, no hope of achievement was offered to the women graduates. Nor must it be supposed that these addresses were intended for both sexes. The phraseology unmistakably reveals the fact that men, and men alone, were held in the thoughts of the speakers. An uninformed listener might well have thought that while life was just opening to these young men, it had suddenly come to an end for the young women. These addresses are significant straws which point unmistakably to the direction of the wind in this new discussion of co-education.

We may sift the reasoning down to a few questions. Is the home the sphere wherein the complete possibilities of the lives of women are to be confined? And if it is, then is the work of the home equal in value to the work of the world? If the work of women is not equal in value to the work of men, why is it not, and how may it be made so? Should the training of college women be reduced to a level with the work they are supposed to do or the work lifted up to meet their training.

A careful analysis reveals the fact that the whole difficulty lies in the failure of college faculties and boards of trustees to perceive the really pivotal point in the whole question. The home of today and the home of a hundred years ago are two entirely different things. There was a time when the work of women was wisely confined to the home, but the modern woman has been freed from many responsibilities and burdens which once belonged to the household, and in consequence her time and talents are largely liberated for other work.

In common with these conservatives I believe the home is, and always will be, the foundation of our nation's greatness and liberty; and I also agree with them that the home, as we have known it, is passing by; but I do not agree with them that anything men can do will stay a change which is inevitable. The home, as it has been, is passing, not thru the over-education of women, but thru the encroachments of commercial changes which have constantly limited its functions until little of dignity remains. It is a popular belief that the "woman's rights" movement has encouraged women to get out of their own sphere and into the sphere of men, and that the home has been impoverished thereby. Instead, the present confusion has arisen because men have gotten out of their sphere and have entered the sphere of women. One needs to turn backward but a few pages of history to discover the time when the majority of women within their own homes were weavers, knitters, garment makers, soap, starch and candle makers, bakers, fruit canners, and meat preservers. To be a good housewife a woman must have learned many trades. Her work may have been menial, but it was at least skilled labor which she performed, and the division of labor between the sexes was fair and equitable. The work of the woman in the home was quite as important to the welfare of society, and quite as dignified and as skilled, as the money-making labor of the man in the field of outside work. At that time the contribution of the home woman to the welfare of society was quite equal to that made by men.

Then came the wrecking hand of commercial progress. Just in proportion to the rapidity with which the business sagacity of men has perceived opportunities for profit in the home vocations of women, these employments have left the home and entered the factory. Her labor has been literally snatched from her hands, and the finished product returned to her, paid for with money earned by some other member of her household. Men bakers, clad in her discarded apron, bake her bread; men tailors fashion her gown; and men milliners, with deft fingers, trim her bonnets. As the atom in the chemical reaction, when liberated, grasps some other atom, thru its affinity, and thus forms a new molecule, so women, freed from many duties of an earlier day by commercial reactions, have seized new opportunities and have thus formed new combinations in social life with which college faculties must reckon. In forced reciprocity they have entered the sphere of the work of men; for industry, energy, and a desire to perform useful work, are innate in the civilized man and woman.

In view of these facts, the reasoning advanced by the new questioners of co-education is not complimentary to the trained intellects of college men. To attempt to confine the interests and the work of women to the home of today means an artificial division of work, and also of actual brain power. Surely, from the college point of view at least, the greatest thing in the world is a well-trained intellect. The world cannot afford to lose one such factor for good, nor can it afford to assign a single trained mind to work beneath its abilities. It is not only the right but the duty of each human being to give to the world the best service of which he or she is capable. If, then, there is a loss of power when women are consigned to home-making, because its duties do not require so high a degree of training as these opponents hold, the logic of the situation is not to lessen the training of the woman until it is reduced to a par with home-keeping, but the true logic is to lift the home until it is upon a par with the highest educated woman. The world has no right to bury a single talent, nor to hide one light under a bushel. If work commensurate with the college woman's best abilities cannot be found within the home as it is, then the home with the woman at its head will be made a factor in the world's work. This will come as the inevitable, in response to the mighty causes which compel humanity to move forward whether it wills or wills not; the causes which are never created by men, nor eliminated by human power. An artificial division of labor can no longer be made between the sexes of today. Some men prefer women's work and do it well, and some women prefer men's work and do it well. Since liberty to do, to be, to feel, to grow according to one's own natural inclination is the keynote of all intelligent progress, this condition must continue. Nor must we forget that, if such a division were possible, it would represent a sheer loss to the world of valuable service. We now know that men and women contribute equally to the hereditary traits of their children, and that at least half the children of the world draw their most distinctive characteristics thru cross-inheritance; that is, the girls inherit the leading qualities of the father and the boys the chief qualities of the mother. So long as women are the daughters of men, we shall find silly, vain, and irresponsible ones among them, because their fathers were so before them; and we shall find others strong, gifted, and able to achieve the best. So long as men are the sons of women, there will be men whose natural bent will lead them to become clerks at a ribbon counter, and there will be others, formed in the image and likeness of their mothers, who will climb the heights of human endeavor. To limit the liberty of the well-endowed woman to use her talent in her own way is as great a crime against race progress as to limit the liberty of a man.

In the transition from the old division of labor to conditions of the future, amusing confusions have arisen, and this we must expect. I once visited a western college conducted on the dormitory plan. Sitting at the dinner table, I complimented the president upon the character of the meal which had been served, since it was superior, from the standpoint of hygienic selection and skilled cookery, to those usually served in institutions of that kind. "Yes," replied the president, "our cook is a man. He is very enthusiastic over his choice of profession and exercises the greatest possible care and intelligence in his work. He earnestly believes that the quality of the scholarship of our school is directly dependent upon the quality of the food he provides." "By the way," added the president, "the lady who sits opposite is his wife. She is the professor of Greek." And why not? Since men have taken from women the portion of the world's work which has been theirs since civilization began, they must be generous enough to reciprocate and to divide theirs too. The home has been robbed of nearly all labor requiring special skill or intelligence, except the care of the children, and even here the former years of care are curtailed by the kindergarten which educators now declare to be a necessary foundation for the best training of the child.

But the home, cry out these questioners, is it to perish from the civilization of the world? We would save it by specially educating women for its functions. Surely women should yet find their all in the duties of motherhood. There is much of pretty sentiment in this theory, but very little of practical common sense. Who is wise enough to teach her? The college woman is a new figure upon the stage of the world's action, and we cannot expect her to have evolved a science yet. She has been forced to expend not a little of her energy in finding a place to stand. The science of men may, with comparative certainty, regulate the inheritance, the environment, and the perfect development of all domestic animals, but can the science of men teach a human mother how to command the mysterious laws of inheritance so that her child may be well-born? Nay, not so. Can the philosophy of colleges teach her to train that child with certainty to its highest and best? Nay, not so. Then who can instruct her? Alas, the A B C of this "science of motherhood" is all the world knows. It may come some day; and, in the interest of the coming race, we may hope that it will come soon. Let us not lose sight of the fact, however, that when it comes it will not be the science of motherhood at all, but the science of parenthood, and it will be the duty of future educators to teach it to fathers as well as to mothers.

No, we may not find woman's *sole* contributions to the world's good in motherhood. In the old days, women had time to perform the duties most vital to the family in addition to motherhood; now that those functions have been removed from the home, she has even more time for work.

Even tho there was no other reason for a woman to work outside her home, the full duties of motherhood should make it imperative. That mother is the best progenitor whose mind is active thru responsibility and whose soul is filled with the satisfaction which comes from useful, helpful work. That mother is the best care-taker, whose intelligence is constantly receiving new stimulus from a variety of causes. The most serious impediment to her success is monotony in her daily life. If she studies child development she does well, but if that is all she does she will fall far short of her own ideal. Altho this is an age of specialization, that specialist is always the best worker who can bring to his duties a general training, and this is pre-eminently true of the mother.

If we are to expect a coming race of great men, we must provide great mothers; and if we are to create a race of great mothers, we must provide great fathers. The race cannot rise by the development of one sex alone, but we "rise or fall together." The best training the experience of the world has devised is none too good for the mother.

I do not know that I can claim any authority to speak, but I may at least testify in the case. In the prosecution of my own work I have traveled in all the states of the Union but two and have been entertained in some 1,500 homes. Many were the homes of college women. I have been permitted to talk intimately with them concerning their modes of life and their aspirations. I have found the comradeship of college husbands and wives upon a high and congenial plane. Their relations have been lifted out of the commonplace and the material into a realm of intellectual harmony, where there must always be found the truest and most permanent satisfaction in marriage. I have found college husbands proud of their college wives, and college wives secure in the love of their husbands. But despite this fact I have found many of these women restlessly groping, amid the wreck and confusion of the passing of the old-time home and the coming of the new, for work satisfying to their ambitions and abilities. Within the souls of many there is a "pent-up Niagara." Many have been childless, many had sent their grown boys and girls to college, and in the prime of life found themselves sitting with folded, idle hands, or frittering away time in social vanities. Still others found time enough, while the little ones were in the home, to feel a nameless void which could alone be filled by useful work. Drudgery, if it be in the interest of work helpful to humanity and of such nature as to test her best strength, would be welcomed by many a college woman as a boon. To other women, self-satisfied, contented with their own stunted development, it is true the new work would come as a burden to be avoided. But can the world afford the loss of power which comes thru an idle womanhood? Can it afford the waste of a motherhood not developed to its best? Certainly mind and character, like muscle, grow more efficient with use, and to secure the best use there must be incentive. Women of means, robbed of important home duties, find themselves consigned, by the customs of our time, to lives of wastefulness. No opportunity for relief offers itself to the majority, and no incentive urges them to find an outlet for their energy. The real question involved in the present discussion of co-education should be how may an incentive be found for the college woman which will guarantee her continued growth, and which will produce work accruing to the credit of her college, her sex, and her race? The new attack upon co-education is based upon the most superficial observations, and the action proposed is cruel and unreasonable. It is not the loss of a college education to a few women which is involved, but the movement is an attack upon race progress. These college men have attempted to seize the wheels of progress in their onward revolution and to turn them backward in their course. Justice demands that an incentive to equal work with men shall be given the college woman. Mr. Roosevelt talks much of the man who "can do things." We need to create a demand for the woman who can do things. Surely, the first duty lies with the colleges themselves. If college professors, now lost in contemplation of the beauties of the stars above or the mysteries of creation in the earth beneath, would turn their eyes humanward in serious study of the question of everyday life for a time, a solution might be found.

It is plain, however, that this unexpected attack upon co-education will impose a new duty upon its friends. That duty is to protect its interests by securing the appointment of more women upon the faculties of our colleges and universities, and especially upon the boards of trustees.

If college faculties are really alarmed over the increasing education and literacy among women, and give credence to the prediction which has been made by more than one distinguished foreign observer, that the time is not far distant when the average American woman will rise superior to the average man in general intelligence and information, let them not lay a staying hand upon the growth of women, but urge the men of the nation to come up higher. If they fear the antagonism of men students to the women students which has been demonstrated in not a few colleges, let them recognize the spirit for what it really is, the manifestation of the savage, not yet eliminated from the civilized man. Let them analyze well their own attitude of mind to discover whether the action of the men students is not a rough reflection of their own point of view. Let them analyze well the present conditions of society, and then in classroom, in chapel, in baccalaureate sermons, in every thought and act, magnify the duty of the college woman in American life, as they now emphasize the duty of the college man.

In a thousand paths the college woman might walk forth to conquest. If she inclines to science she may maintain her laboratory in her own home. She no longer needs to spend her time in canning fruits and vegetables, for this work has left her home and gone to the factory; but a problem has come to take its place. How is the factory preserving done? With formaldehyde and salicylic acid, with glucose and analine. Then, with crucible and test-tube, let her nominate herself the nation's detective and ferret out the sins or the virtues of every cannery in the land. When her facts are in command let her call forth the legions of other college women to wage a war in the interest of pure food. Tho she must overcome glucose trusts, political rings, and public credulity, let her map out her campaign to save our nation from the wrecked health of body and mind toward which this commercialism is rapidly forcing us. The college woman who may win the victory for pure and honest food, will deserve to rank with our highest and best. If the college woman inclines to philanthropy, let her organize her forces to teach the women of the poor hygienic cookery and sanitary housekeeping. Men may build model tenements, schools may try to educate the young to better things, but until trained women teach the housewives of the poor the higher standards of the home, the race will not rise much beyond the present.

Invite the college women to share freely in the work of the world, according to her inclinations and her abilities. Recognize her as a positive factor in society, as from the character of her endowments we may safely conclude nature intended her to be. Then endow her with the ballot that she may have authority to enforce her opinions, and to do the work of her choice in the most effective way. In the beginning, the gift of education to the people thru our public schools was not given in the spirit of philanthropy, but was extended in order that our government might rest upon an intelligent citizenship. Now that a majority of the products of the public schools are girls, and the preponderance of literacy of the nation has tipped to the side of woman; now that the interests of women can no longer be confined to the home, but are to be found on the outside as well as the inside of that home, the logician will have difficulty to find a sound reason for believing that the government, as well as the home, the school, and the church, may not be safely trusted to the joint judgment of men and women.

Surely college faculties, with their trained powers of observation and their breadth of view, need feel no paucity of resources in the effort to find incentive for the college woman. The only hindrance is their own failure to perceive that she needs an incentive; and meanwhile eyes are blinded by the shadow of the belief that the sphere of a woman is within the four walls of her home, while the sphere of a man is compassed only by the limits of the wide, wide world. There is no sphere for men and no sphere for women, but a joint responsibility is laid upon both to give their best and highest service to the uplift of the race. With perfect liberty of choice each man and each woman will perform that service, and in doing so they will find their natural sphere. Perfect freedom of action and perfect freedom of training is the need of the hour. If in the evolution of society the home as we have known it, with its rooms to be swept and its furniture to be dusted, its food to be cooked and its dishes to be washed, shall succumb to the general wrecking process, we may rest assured that the change will come so gradually there will be no jar. The home as it is to be will silently steal in to fill the void. We may not locate the new home in space. We may not describe its material equipment, but we may rest assured that so long as time shall last, whenever two congenial souls shall meet, they will unite in the old, sweet way, ever new, and where they pause, there will be a home. That home will continue to be the bulwark of our nation and our race. Children will come to it, more beautiful, better born, and better trained than we have been. The tenderness of mother-love planted ages ago in our animal ancestors will never know its divinest flower until women, under the influence of encouragement and incentive, have developed to their highest and their best. In the transition, which we could not stay if we would, the eternal forces of evolution may be trusted to save the race from mistakes too serious. Meanwhile it is our present duty to hail each college woman, as well as each college man, as a possible apostle of higher light, and our safest guide will be the motto, "Liberty to all, curtailment of opportunity and growth to none."

EDUCATION IN THE PHILIPPINES

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I shall not at the present time speak of the educational system planted in the Philippines by the Spaniards. In the time of the Spanish sovereignty the church was a part of the state, and the church controlled all education. Manila boasted of a university which had a papal charter, and the Jesuits had a college there; and in Manila and all the other organized towns of the archipelago there were public schools for elementary instruction. We do not know statistically the extent or efficiency of their work, but the masses of the Philippine people are certainly uneducated and grossly ignorant, and it seems no exaggeration to say that only a minority of them can read or write. But, in estimating the services of Spain to the Filipinos, we must remember that she lifted them from barbarism to civilization, and from heathenism to Christianity (excepting only the Mohammedans and heathen in Mindanao, Sulu, Palawan, and other remote parts, who together constitute less than one-fifth of the entire population of the archipelago), and that, if she did not accomplish the elementary education of all the people, she did almost as much in that direction as she had done for the people of her own country; while in the matter of collegiate and professional instruction the educated Filipinos one finds scattered — tho very sparsely, it is true — all over the islands, bear living testimony to Spain's desire to bestow the highest intellectual gifts upon a select and favored class of young men among her subjects in the Philippines.

As I studied and reflected upon educational conditions in the Philippines, it seemed to me that the soil was peculiarly fitted for the kind of sowing which American administrators would naturally undertake. Here, as at many other points, I discovered a perfect harmony between the needs, desires, and ideals of the Philippine people and the practice and traditions of the American people. The Filipinos wanted free public schools for the entire population; but free public schools for the instruction of the children of all the people is the central feature of the American educational system. It is natural, therefore, for us to give them, not only what they desired, but what they had demanded in every revolutionary program their patriots had adopted when in rebellion against Spain. I never saw anywhere, in any part of the world, a people who longed more ardently for education. Conscious of ignorance, the people desire instruction. They feel that a new era is opening for them, and realize that it is only thru popular education they can accomplish their national mission. They have seen what schools have done for Japan, and it is the dream of every thoughtful Filipino to make of his country another Japan — with the additional advantage of being Christianized as well as civilized, and of having a republican instead of a monarchial government. And so, as I have said, all thru the islands, there is a hungering and thirsting after knowledge, and the educated man is the object of popular admiration, and he easily becomes the political leader whom the people delight to follow.

In view of these facts the first Philippine Commission, of which I had the honor to be president, recommended in its report that "public education should be promptly established, and, when established, made free to all," and also that "English should be taught in the schools of the archipelago to the utmost extent feasible."

These recommendations were adopted by President McKinley, and incorporated in his instructions to the second Philippine Commission, of which Judge Taft was appointed president. And the results, short as the interval has been, amply confirm the wisdom and beneficence of the policy. About nine hundred American teachers are now at work in the Philippines, and about one hundred more will soon be appointed. Between three thousand and four thousand Filipinos are employed as elementary teachers; and of these about two thousand daily receive at least one hour of instruction in English. Not less than a hundred and fifty thousand children are enrolled in the free primary schools. The number of native adults receiving English instruction in evening schools conducted by American teachers was ten thousand in October; but at the rate of increase then exhibited there are probably twenty thousand, or even thirty thousand, at the present time. There is a wide and enthusiastic demand for instruction in English in all parts of the archipelago; and next to that is the demand for instruction in manual training and the mechanic arts, the lack of which has hitherto so greatly retarded the progress of agriculture and other industries in the Philippines. It is another proof of the intelligence of the Filipinos that they so quickly recognize the kind of education they most need: applied science for the development of the vast natural resources of their islands, and English for use in government and in trade and commerce.

I need not describe the organization of the public-school system of the Philippines. It is, of course, an adaptation of the system of our own states and territories. There is a superintendent for the archipelago with eighteen district superintendents. Each town has its board of education with advisory functions. The moneys expended are all Philippine, nothing coming from the treasury of the United States. Our function is to administer the funds of the Filipinos for their educational benefit, but in view of the coincidence between the educational desires of the Filipinos and the educational system of the Americans, I am firmly convinced that no other nation on the globe could render the Filipinos such valuable educational service as we are doing at the present time. While the American teachers who went to the archipelago were undoubtedly attracted by the compensation offered — the salaries ranged from $900 to $1,200 — I know that some of them, and I believe that many of them, were actuated by the spirit of educational missionaries, and the letters I have seen from them show that among them are those who are devoting themselves to their noble but difficult work in a spirit of unconscious heroism. And they have the earnest support of Judge Taft and the other members of the Philippine Commission. But undoubtedly the chief praise for the success of our great educational work in the Phillippines must be awarded to the able superintendent, Mr. F. W. Atkinson; and personally it is a great satisfaction to me to recall that when Mr. Atkinson consulted me in his doubts about accepting the appointment, I strongly advised him to take the position and pointed out the possibility of such a work and reputation as he has since performed and acquired.

There are two unsolved problems, two difficulties, which confront our educational work in the Philippines. One is the relation of the church (by which I mean the Catholic church, for the civilized Filipinos are all Catholics) to education; the other is the relation of the English language to other languages as a medium of instruction.

As concerns the church, you will recall that it has been for centuries a part of the state in the Philippines. The two were inseparable; and of the two the ecclesiastical power was undoubtedly more potent than the civil. Spanish officials and military officers came to the Philippines, and after two or three years returned to Spain; but the friar remained in his parish, the permanent representation of Spanish sovereignty, and partly by law and partly by custom he came to wield the authority and sanctions of the temporal power as naturally as he exercised the functions of his own spiritual office. In education his voice was supreme, as you will see tragically illustrated in Rizal's *Noli me tangere.* And education apart from religion, schools separate from the church, were not only the objects of the friar's detestation, but a thing absolutely unknown among the Filipinos.

Now, altho the friar has lost his influence among the people, the Filipinos are, and remain, good and loyal Catholics. Consequently the success of our educational work in the islands will, in no inconsiderable degree, depend upon its acceptability to the authorities of the church. We have separated church and state, clearly and decisively. We have made public instruction purely secular, tho, in imitation of the Fairibault plan, we permit any religious denomination, under certain conditions, to use the schoolhouses for purposes of religious instruction. I believe that so far no religious denomination has availed itself of this privilege and, on the contrary, private and parochial schools are springing up in which religious instruction is given and the Spanish language used as the basis of education. Owing to the poverty of the people, it will not be easy to maintain such voluntary institutions as successful rivals of the state-supported schools; yet the Catholic church never shrinks before difficulties, and there is always the prospect that the Filipinos, if permitted by Americans to manage their own educational affairs, would vote public moneys for the support of parochial schools, or even combine the public and parochial schools under the authority of the church in some such fashion as is practiced by the Catholic and French subjects of Great Britain in the province of Quebec. From the American point of view, it would greatly simplify things if the Catholic church would content itself with the extension of the Fairibault plan to the schools of the Philippines. But the outlook at present is not favorable to that hope. And, if it comes to a contest of forces, the church has, and is likely to retain, the hearts of the people, and will control their religious faith, including the question of the place of religious instruction in the schools. The government, on the other hand, has public funds for the support of its schools, which therefore ought to be the more efficient. The people themselves will be divided between the demands of the church and the superior scholastic attractions of the public school. What the ultimate solution may be, it is impossible to foresee. In the meantime, the rivalry between public and parochial schools is stimulating each to its best efforts, and in that way at least the Philippine people are the gainers.

The second difficulty to which I referred is the language question. Of the 6,500,000 civilized and Christianized people of Luzon and the Visayas, possibly 5 or 10 per cent. speak Spanish. The rest—some six million souls—know only their own vernacular. Of these, 2,500,000 speak the Visayan language; 1,600,000 the Tagalog, 500,000 the Vicol, 600,000 the Ilocano, and the remaining million the Pampango, Pangasinan, and other dialects. The number of languages among the Mohammedans and heathen is very great. But, so far as concerns the Filipinos with whose government we have to do—the civilized and christianized Filipinos of Luzon and the Visayan islands—two-thirds of them use only two languages, Tagalog and Visayan, while the remaining third have some acquaintance with one or other of these dominant languages in addition to their own vernaculars.

Now, what shall the place of English be in this polyglottal archipelago? That it should be the official language is reasonable enough, tho the use of the natives' own tongue should be permitted in the courts of justice, if not also in the legislature (as French is authorized in the parliament as well as in the courts of Canada). As to Spanish, I do not see that any special effort need be made to perpetuate the slight hold it has gained upon the Filipinos. But the substitution of English for Spanish as the official language will not make it the *general* language—the popular medium of communication. Great is the schoolmaster, but even the schoolmaster cannot eradicate the language which the pupils acquired with their mothers' milk. I sometimes think that our American administrators in the Philippines are guilty of overlooking this truth, which is indeed a truism. English will be indispensable for the politicians at Manila, and the traders there and elsewhere. But does any reasonable man suppose that the Philippine peoples in general can be induced to forget their own vernaculars (which come, as it were, by nature) and laboriously and painfully acquire English, which the masses will never have occasion to employ? Such an illusion defies, not only the psychology of language, but the lessons of history. Why, English experience in Quebec and Spanish experience in the Philippines, to go no farther afield, should dispel such a fancy. All history teaches that no race or people ever abandons its vernacular. If the schoolmaster could impart facility in the conversational use of a foreign language, how many hundreds of thousands of American children would today be able to converse in French, German, and even Latin or Greek! But everybody knows that to speak French or German, even as a bungler, it is necessary to go to France or Germany and hear and speak no other language for a year or two. And then, on returning, how soon the acquisition fades away, unless you have constant practice in conversation! The naïve assumption that we can teach the Filipinos to speak English by scattering a thousand American teachers among six million or eight million natives (who have no use for any language but their own) is surely the climax of American energy, self-confidence, and invincible optimism!

I dwell upon the matter because of the pernicious consequences which may follow from it. One is pedagogical, the other political. If you undertake to anglicize the Filipino, you may think it your duty to teach him everything thru the medium of English. If you adopt such a policy, very restricted indeed will be the pupil's acquisitions. The foreign language will stand in the way, blocking all progress. Take an analogy too favorable to us. Suppose the children in the elementary schools of an American town of eight thousand souls, where one German lived, were required to learn their arithmetic, reading, writing, history, and geography, not thru the medium of their own language, but by using German only, what progress do you think they would make? Well, in the same way, if our thousand American teachers are to do the most effective work among six million or eight million Filipinos, they must learn the language of the people among whom they live—Tagalog in central Luzon, and Visayan in Panay, Negros, Cebu, Samar, and Leyte. Reading, history, civics, geography, and arithmetic are more important for the rising generation in the Philippines than any foreign language—even tho that language be English. The few officials and traders who need English will undoubtedly learn it, as their fathers learned Spanish. The people as a whole have no need of English, and, while it should be an optional course in every school that has an English teacher, I would not make it compulsory in any elementary school, and still less would I make it the basis of all other instruction.

Still more pernicious is the political consequence that has been drawn from this linguistic fallacy. It is claimed that we must train the Filipinos all to speak English in order to make a nation out of them. I have already shown that it is impossible for us to alter the speech of a whole people, and I now go on to add that, tho unity of language is a circumstance favorable to nationalty, it does not constitute nationality and is not essential to it. The Germans in Austria speak the same language as the Germans in Prussia, but they are under a different flag. Indeed, the American empire is a congeries of different peoples. And Switzerland has four national languages—French, German, Italian, and Rhætian ; yet there is no people in the world that has a stronger sense of nationality. Nationality is compounded of unity of interest, sentiment, and aspiration, and it is favored by unity of race, religion, and language. All these factors, with the exception of language, enter into the composition of Philippine nationality; and that is more than most European nations can boast of; and, in the matter of language, Luzon and the Visayan islands are not worse off than Switzerland, Austria, and Russia. The vital elements of Philippine nationality are separation from the rest of the world, community of interest, unity of race and color, and identity of religion, sentiment, and political aspiration. Philippine nationality is already there; it does not have to wait for the language lessons of the foreign schoolmaster. If there could be no nationality until all Filipinos had learned English, there never would be one. Thank God the national consciousness of the Filipinos is His gift, not our manufacture.

I repeat that, as nearly two-thirds of the civilized and Christianized Filipinos speak either Tagalog or Visayan, they are, in the matter of language, better qualified for nationality than Austria, Russia, or Switzerland; and, since all educated Filipinos, whatever their dialect, speak Spanish, the people of the archipelago enjoy a common medium of communication which is denied to the people of Austria, Russia, or Switzerland. Of course, the heathen and Mohammedans of Sulu, Palawan, Mindanao—perhaps one and a half million souls in all—have multifarious tongues and dialects; but it is not of them, but of the six and a half million civilized and Christianized Filipinos of the rest of the archipelago that I am speaking. It is these who make what is known as the "Philippine problem." They are the people who fought us. They are the people to whom, on July 4th, President Roosevelt proclaimed amnesty and on whom he conferred civil government. They are the people who have been demanding independence and who will demand it in the future. They are the people whom we must eventually either make our fellow-citizens and equal partners in the United States of America or set up as an independent republic in the Orient. And my point is this: that their present lingual condition is no bar to independent nationality, but distinctly more favorable to it than the lingual condition of several of the great nations of Europe; and that a knowledge of English is not, for them, a prerequisite to independent nationality.

No one can consider the educational work we are undertaking in the Philippines without wondering what the issue of it all will be. Some of the results are obvious enough. There will, for example, be a great multiplication of schoolhouses, school furniture and apparatus, and school books. The rising generation of Filipinos will go to school. Elementary education will be the possession of all the boys and girls of Luzon and the Visayas and the civilized portions of Mindanao and other islands. Its character, too, will be different from that of the elementary education given in the time of Spanish sovereignty. It will be secular, not religious; and it will be more realistic and less formal, developing the powers of observation and thought as well as the memory. And high schools, colleges, and universities, with modern subjects—living as well as dead languages and literatures, history and political science as well as philosophy, yes, and modern physical science—will be established in the Philippines as they are now in America and in Europe. And, on the side of intellect and scholarship, the Filipinos may be expected to rival the Japanese, as well as in material civilization and the application of the sciences to industrial life, wherein Japan already presents a very American appearance.

This modern education will undoubtedly lead to an intellectual emancipation of the Filipinos. Physical science, historical criticism, and rational philosophy will profoundly leaven existing conceptions, beliefs, and views of man and of the universe. In non-Christian countries like Japan and India the result of the contact of European science and scholarship with oriental modes of thought has generally been the production of skepticism. What the effect upon a Christian people like the Filipinos, to whom the Jesuits have already taught astronomy at least, may be, it is difficult to forecast. But, whatever the temporary results, we cannot but believe that the mingling of oriental and occidental intellects will ultimately lead to broader and juster views, both of human nature and of the mysterious universe in which men find themselves so mysteriously appearing and disappearing.

But it is not only the scientific and material elements of American civilization that are destined to reproduce themselves in the Philippines, tho these will greatly modify, and perhaps transform, the existing methods of production, transportation, and exchange. While economically and industrially the archipelago will take on a new and much improved countenance, there is one other phase of Philippine life—a deeper and more vital phase—that is destined to be still more profoundly influenced by all our educational work in the archipelago. If American civilization differs from European, not by the greater excellence of its literary and scientific productions, but by the superior skill and inventiveness with which it embodies laws and principles in machinery that nature operates, thus increasing man's economic efficiency, it also differs from that older civilization in another respect, which cannot but have momentous consequences when transplanted to the Philippines. I refer to our political philosophy, which is radically different from that of any European people, past or present. We glory in our applied mechanics, which are destined to develop the physical resources of the Philippine islands; but far more glorious is our political philosophy which is full of hope and promise for the Philippine nation and for every people and race on the globe.

Now, every teacher we send to the Philippines is a missionary of the American gospel of self-government and national independence. For he will tell the Filipinos about the United States, and teach American history in his school. Every Fourth of July will not only record the declaration of American independence, but utter the prophecy of Philippine independence. The birthday of Washington will inspire Filipinos with the patriotic ambition to consecrate themselves to the liberation of their country. The name of Lincoln will perpetually remind Filipinos than to people, not even the Americans, is good enough to govern itself and to govern another people. The speeches of your orators, from Patrick Henry to Wendell Phillips, will be declaimed by Philippine schoolboys from Aparri to Zamboanga with all the fervor and conviction, with all the passionate reference to home and country, that made those eloquent Americans such irresistible champions of the rights of nations and of humanity.

In pleading the rights of your oppressed ancestors, Burke said in the House of Commons that the English people was the last people in the world to argue any other people into slavery. I say that the American people is the best people in the world to educate any other people up to independence. Our history, our politics, our books, nay we ourselves would have to be different were the result other than this. The kind of people we are, the way we govern ourselves, the history we have made, and the political philosophy we have given to the world, all consecrate us Americans as the advocates and preachers of liberty, democracy, and national independence. And I believe that an independent Philippine republic will be the final result, as it would be the most glorious consummation, of our great educational work in the Philippine islands.

HOW THE SCHOOL STRENGTHENS THE INDIVIDUALITY OF THE PUPILS

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It is often said that a common-school system tends to cast all children in a common mold, and thus destroys or suppresses individuality. The common course of study, the three R's, geography, and history; the uniform disciplinary pressure insisting on regularity, punctuality, silence, and industry; the action and reaction of one pupil upon another; all these result in a self-adaptation of each pupil to the social standard of the school as a whole, and all these things are alleged to have only a leveling influence and to produce a common type of character, almost reminding one of the uniformity of product of the machinery of our manufacturing establishments.

This view has some plausibility, especially when one believes that the school produces a mechanical effect upon the child; but its plausibility grows less and less when we consider the actual relation of school industry to the production of individual power.

The good school will make its pupils alike in obedience to discipline and as to the possession of a knowledge of mathematics, geography, history, language, literature, etc., but this means that it will make its children alike in possessing the power of developing and expressing their individuality.

Take first the most mechanical side of school education, namely, its discipline. The pupils are required to be regular in attendance on the school sessions, and their coming and going is regulated by minute prescriptions as to time of entering and leaving, as to taking up each study, and attendance upon recitations or class exercises. This, in school parlance, is called punctuality. Regularity and punctuality secure rhythm of action, and each pupil, by the acquirement of these semi-mechanical habits, makes possible school instruction. He learns to combine with his fellows. Without regularity and punctuality one cannot have concert of action. The work of a social whole becomes impossible. The sort of individualism that is left after taking away social combination is such as belongs to the isolated man, and, on a large scale, it produces the most degraded specimens of humanity. The Robinson Crusoe who has to do everything for himself does nothing well. But when he associates with him Friday as a co-worker he becomes — not twice as powerful, but four times as powerful. Ten men combined are a hundredfold more powerful than ten men isolated one from another.

To give to each person in the social whole the net results of the experience of all his fellows is the object of education, and indeed it is the object of social life as a whole. Man is fitted by his faculties for this vicarious process of sharing the experience of others—he can live over in himself the lives of his fellowmen without having actually to make all the original experiments and suffer all the temporary defeats and disappointments incident to the career of first experience. But the errors and defeats of one person save his fellows from repeating precisely the same experiments. It happens that ninety-nine one-hundredths of one's doing and thinking in a well-educated community is guided by the prescriptions of educative agencies of some sort. There are educative influences, first, in the family; second, in the industrial community; third, in the political state; and fourth, in the church, taking the church in a broad sense as the collective instrumentalities that teach the accepted view of the world which is expressed in the prevailing civilization. The so-called uneducated person who has never been to school is all the more a person who follows the use and wont of his community — he has a little bundle of habits that he has learned in infancy from the family, and he follows them as if they were instincts or automatic impulses. He acts mostly from his spine or occiput—what are called the lower nerve centers—rather than with the cortex of his brain, which is used by the thoughtful person. The lowest savage has his traditions just as the highest representative of civilization has. His traditions enable him to follow the use and wont of the tribe to which he belongs. All of the tribal facilities combined do not suffice to give its individual members an ability to go outside of the narrow limits of the tribal territory and make business combinations with surrounding peoples nor to share with those peoples in their views of the world, discussing with them their theories and thereby gaining more profound views. Each person in a community is continually making some observations upon nature or thinking out the causes and results of facts and events in his experience. To share in the aggregate results of the observations and reflections of one's tribe, one's nation, or of the world's civilization, is a very important privilege in any case, but the privilege varies in value enormously according to the scope of the participation involved. It is a good thing for the unlettered peasant to learn by hearsay from his fellows what they know by experience and what they have thought out. But it is incomparably more useful to be able, by means of books and the printed page, to have access to the observations of all men who have observed and reflected in all times and places. School education, as distinct from the education of the family, the state, the church, and the industrial community aims to give the means of access to the storehouse of observations and reflections of men in all ages and in all climes. This, I have already said, is a help to the development of individuality. It gives it the necessary means of expression. It stimulates the individual to travel out of the beaten paths of his neighborhood, to emulate the great men of the world and to climb the heights of achievement.

One may see what the school means in the development of individuality by going over the traditional course of study in our schools. This course of study excites our admiration because it has not been made by the wisdom of a few men getting together as a committee, but in its substantial outlines is a growth rather than a conscious product. The use of the written and the printed word is the first object of the school instruction, and it changes the child from ear-mindedness to eye-mindedness. Confined to the use of words known only by the ear, the individual has great difficulty in acquiring or understanding a technical vocabulary. The cultivated man, whether literary or scientific, thinks in the form of printed or written words, and accordingly thinks in accurate technical terms and has at his command fine shades of expression.

Stop and consider at this point whether the individuality of the child is not reinforced by the power to use these instruments of reading and writing. Without instruments he has a small scope of opportunity to act and to express his individuality. Armed with the arts of reading and writing, the opportunity of gaining facts and ideas from his fellow-men is increased indefinitely. He may manifest his individuality in a thousand new ways. By this process he will develop his individuality where otherwise it could not have been developed for the lack of the proper means. The experience of the illiterate is limited to what he can observe in himself and in a small circle of neighbors. But his school-educated companion, who can read and does read, is all the time widening his mental view by what he gets from the printed page. He is all the time growing and with increasing rate of progress in accuracy of thought, and at the age of fifty years he is growing far more rapidly than at the age of forty. In fact, he continues to grow more rapidly at sixty and at three score and ten, if he reaches that age, than at any previous epoch. The illiterate, after leaving school, perhaps doubles his power just merely by oral intercommunication with his fellows in the course of thirty years of his life, but the average school-educated person, who can read and does read, grows at least ten times as much.

Who cares for the individuality of a person that cannot aid heroically in the conquest of nature or in creating social combinations and the development of institutions for the benefit of man. The individuality of the illiterate is mostly an unrealized possibility. The school helps the child to realize his individuality by getting hold of the instruments and appliances which form the right means for adding to his personal experience the vicarious experience of the race. Hence the school-educated is able to reinforce himself by the social whole.

The branches of study in the elementary schools include, not only reading and writing, but also arithmetic, geography, the grammar of one's native tongue, and the history of one's nation. Every one of these branches endows the pupil with some insight which gives him an increased ability to solve the practical questions of his daily life. Take arithmetic, for instance: the savage who cannot count beyond five or ten is limited and hampered in making combinations of things and forces. It is next to impossible to effect exchange of the most necessary articles without arithmetic and the merchant class of persons. This class becomes very numerous in the highest civilization. Its sole business it is to collect and distribute the productions of industry, and it can scarcely be said to exist in the tribe or in the illiterate orders of civilization. Karl Marx in his book on Capital, a book that forms the Bible of modern socialism, reduces the employments of mankind to two—(*a*) the production of commodities and (*b*) the exchange of them. He invents an algebraic formula to express this and to show the relations of labor to capital. C—M—C means the circulation of productions thru the aid of the market; C (or commodities) are sold and converted into M (or money), and then the money (M) buys commodities (C) again. The laborer has brought his productions to the world-market and exchanged them for what he needs of food or clothing, creature comfort or culture, and the circle is complete. Marx would minimize the usefulness of the middle term M (or money), which represents the class of men who are capitalists and merchants. Their formula is not C—M—C, but M—C—M, he tells us. They start with money (M), and with it buy commodities (C), but they buy only to sell again—they convert their commodities (C) into money (M), and aim to increase their capital by the exchange. M—C—M; money becomes more money by buying and selling commodities. But Marx does not seem to notice the importance of a world-market, or, indeed, of a market of any kind. He supposes that that will come by nature, just as grass grows. But the fact is (and this is my reason for mentioning Marx in this paper) that the person who invents the machinery of exchange and the world-market is by far the greatest benefactor, because he takes things from the place where they are not wanted and carries them to the place where they are wanted—he converts mere things into wealth; he makes them property or capital. He unites widely sundered peoples by ties of mutual service. This gives us a glimpse of the way in which the school, with its three R's, performs its function of stimulating individuality—for the school-educated boy or girl sees more possibilities in each thing of nature than the illiterate sees. He has also acquired an appetite for social combinations and has obtained directive power to put together things into a machine and link man to man in a manufactory.

If one takes the view that the so-called middlemen, those who collect and distribute, are not producers in the sense that they add wealth to the community, he should revise his theory, considering that the surplus productions are worth little or nothing unless they are carried from the place where they are superfluous to the community that needs and wants them. The immense peach crop of New Jersey would be of very little value were it not for the markets of Philadelphia, New York, and the merchant class of the population, as well as the class engaged in transportation. The one billion of dollars annually earned by freight of goods in the United States adds just that amount to the value of the goods transported.

The study of geography in the elementary school substitutes for exaggerated, distorted, monstrous, superstitious notions a reasonably accurate view of the physical world as the habitat and working field of man. It contributes much to the ability of the child to read and understand the daily-printed information that comes before him regarding the noteworthy events of nations and peoples living on the face of the earth. What a lameness to the individuality—no matter how much gifted by birth but which labors under the disability of illiteracy—that has not learned anything of geography!

Think of grammar and its bringing to consciousness the parts of speech. This study develops the power of introspection more than any other subject. It enables one to analyze readily and accurately a complex statement or a complex nexus of conditions presented to him, and gives him a growing power to separate the essential from the unessential and to discriminate things and forces, and reach clearness thru a connected process.

Then the history of one's country, the story of the rise of its nationality, its collisions with other peoples, the heroic personages in its gallery of worthy men who have, by supreme self-sacrifice, earned the respect of their countrymen — what a lame individuality would result if the knowledge of one's national history were missing, or if one possessed only such a knowledge of it as could be obtained by hearing the anecdotes of idle men; for we must remember that oral information comes mostly from idle people. Those who are engaged in the highest and worthiest undertakings do not have leisure to recount to their fellow-workers any systematic view of the fragment of history in which they have personally borne a part.

If the school teaches all the children of the community the good habits of regularity and punctuality it does so much toward enabling each pupil to work in the social combinations that exist in every civilized community. It gives him some power himself to direct these combinations. Directive power is a higher manifestation of individuality than that which simply obeys direction from a leader. The school habit of silence, the repression of one's tendency to prate and chatter, is another element of directive power, quite important. The ability to dig out one's lesson from the printed page and to learn to be critical and exacting in sifting the statements of others is also another service which the school contributes to the development of the individuality of the child. One kind or method of attention is developed in the school by requiring the child to study the text of the book by himself and master its contents without aid from teacher or fellow-pupil. The child learns to look below the surface and to seize the principle involved. He learns to overcome by patient and continued industry difficulties which at first seemed altogether insurmountable. The other kind of attention is that cultivated in the class exercises or recitations. All of the pupils concentrate their attention on the statements of the pupil who is reciting and on the cross-questioning of the teacher. It is a dialectic which calls for alertness and versatility of mind in the pupils who take part in it. But this kind of attention is not a substitute for the other one just mentioned. It gives one self-possession in the presence of difficult and unexpected emergencies, but it is not a substitute for the patient industry which absorbs itself in a study of the object and its causal relations.

The studies of the school, on the one hand, develop a knowledge of nature and arm the mind of the pupil with the experience of those who have conquered or are conquering nature. On the other hand, the school studies relate to human character and arm the pupil with a knowledge of human nature. Of the latter character are all of the fine literary selections in the school-readers. Each one of them gives a glimpse of human nature, which relates to what is generally sub-conscious — below the threshold of consciousness in the ordinary person's mind. The poet or literary man has succeeded in giving a worthy and elaborate expression to some one or more phases of human experience and thereby is making a conscious expression of this forever the possession of his fellow-men.

One will admit that there is a metaphysical catch involved in this complaint against the school that it has the effect of obliterating the native individuality of the child. The history of the United States shows that persons who go out to the frontier as pioneers prove themselves to be full of resources in the way of subduing the wilderness and converting it to human uses, destroying wild beasts, defeating the Indians and banditti, and in like adventures. This would be called individualism by most people, but it is a very small part of individualism. The individualism which one wishes to cultivate in urban society fits one to become self-directive among his fellowmen, and not merely to be effective against wild nature at first hand. In order to hold one's own in the midst of the urban or industrial civilization it is necessary to have a knowledge of human nature and a knowledge of the motives and purposes of one's fellow-men—yes, and of the essential aims of the civilization in which one lives. It should enable one to select his vocation intelligently and make a success of it in a competitive civilization.

The one with small individuality takes his initiative from others and does not strike out for himself. He is dragged or pushed along, and does not contribute his quota of directive power to the community. This second kind of individuality, which can hold its own in an urban civilization, is scarcely considered by most of those who talk or write on the development of individuality, and the very best training of this kind of individuality—namely, that in our large schools—is therefore popularly supposed to have the effect of obliterating individuality. This same kind of individuality is the most important of all individuality—it is civilized individuality. The development of this higher order of individuality can take two directions. First, that of resistance to the influence or demands of the social whole. This development of the individual makes him disobedient at school and a criminal in society, and converts his career into a zero by uniting against him the organized forces of the community.

Secondly, the development of the individuality may take the normal direction of mastering the motives and purposes of the social whole and growing into a leader of some one of its manifold interests. This lies in the direction of attaining skill in a chosen industry and in attaining thru letters a knowledge of science and philosophy, which are social aggregates of observation and reflection; a knowledge of history, which shows the nature and behavior of social organizations, especially of the state and church and civil society; an acquaintance with literature, which reveals the depths of emotion and feeling and shows how feelings become conscious thoughts and actions, literature in this respect being the study, *par excellence*, for giving a knowledge of human nature. Besides this, the pupil needs a training in the control of his individualism for purposes of intelligent co-operation with others, and he gets this in a large school better than in a small school, and he gets it in a school far better than with a private tutor or by himself in the family.

Dr. Thwing, who has written so much and so well on the higher education, has shown by the statistics of men distinguished for letters and science and in the practical fields of activity, that the college graduate is two hundred times as apt to become distinguished as the rest of society—his chances of originality and for the cultivation of a higher order of individuality that can leave the beaten path and accomplish something that earns him the gratitude of his fellow-men are two hundred times those of the ordinary man who has not received a higher education.

Whatever gives to the mind a larger view increases individuality; whatever gives to the youth the power of self-control and of inhibiting his impulses and whims for the sake of combination with his fellows increases his higher order of individuality and makes him a more worthy citizen, and in doing these things the common-school system is performing its greatest work.

THE SIMPLIFICATION OF ENGLISH SPELLING A PRESENT DUTY

CHARLES PAYSON GURLEY SCOTT, ETYMOLOGICAL EDITOR OF THE "CENTURY DICTIONARY," RADNOR, PA.

Mr. President, Ladies and Gentlemen, Members of the National Educational Association:

I have been invited to speak to you as a dictionary man, and particularly as an etymologist, an explorer and historian of words, upon the simplification of English spelling.

In the short time allotted to me I can do no more than to make some general statements and express some opinions. But I wish it to be understood that what I shall say concerning the treatment of English spelling is not merely my personal opinion, but represents, as I can prove, the general opinion, the solid judgment, of practically all the recognized scholars in English, in America and in England. You may ignore or forget my opinions, my utterances. It matters not. But, as teachers and writers, you cannot always ignore, you cannot always disregard, the deliberately formed and deliberately expressed opinions, the repeated advice, the serious appeals, of all qualified scholars, on a matter of so great importance in all teaching and writing as English spelling.

The simplification of English spelling is a duty. It is a present duty. It is especially a present duty of *you;* not of "all friends of progress," not of "the spirit of the age," not of any other vague abstraction, but of *you;* you, the members of the National Educational Association; you, the representative teachers of the United States; you, the chosen leaders, in state and nation, of the great army of teachers; you, the directors of the great American system of public schools; you, the presidents and professors of our great colleges and universities, the engineers of all the electric lines of learning. It is the present duty of *you*.

This is a bold statement, but it is true, and for this reason: that you, whom I thus address, are rational beings, reasonable creatures. That is another bold statement, perhaps, Mr. President, but I will risk it. I wish to placate the audience, and perhaps they will be reasonable enough to allow me a little pleasant exaggeration.

For this reason, then: that you are, in the main, rational beings. By your membership in the National Educational Association, by your profession as teachers, by your functions as national and state officers, by your acceptance of leadership in academic learning and instruction, by your manifested interest in the acquisition and spread of knowledge, you proclaim yourselves rational beings; and, being entitled to all the rights and privileges unto that degree appertaining, you must also accept all the responsibilities and duties of the same. The responsibilities are grave. The duties are numerous.

First among those duties is the duty of being rational, even about English spelling—one of the most irrational things in the world. As rational beings, you must look at English spelling and see what it is, and find out how it came to be so; and you must consider, in view of its present condition, what can be done, and ought to be done, to fit it better for its present and future uses. And you must do this, each of you, by yourself and for yourself. You must lay aside authority, and tradition, and prejudice, and apathy, and must look into the thing itself. Or else you are not rational; and you must be rational. We must all be rational. As teachers, as writers, we must use our minds, and think. It is uncomfortable, it is a trial, but we must do it.

What is meant by simplification of English spelling? It is spelling English words more simply, without useless letters or other dispensable irregularities. Simplified spelling is a form of amended spelling or improved spelling. It is in the direction of phonetic spelling, but it is not identical with phonetic spelling. It is a common mistake to confuse the two. No philologist proposes strict phonetic spelling for popular use. All philologists favor simplified spelling, in some form, on a phonetic basis.

The simplification of English spelling must be by regulation of the existing forms. That regulation implies a rule or standard. That rule or standard is to be found in the actual facts and prevailing customs and analogies of English spelling, and in the phonetic basis still therein present, tho now partly obscured by the cherished accidents of time and the accepted mis-teaching of spelling-books.

The Roman alphabet is that phonetic basis. It can be easily adapted to a clear phonetic use and made a satisfactory phonetic standard of reference for the regulation of the ordinary spelling. The work has been done. There is a general consent among scholars. The principles have been laid down. They may be briefly stated.

First, of course, the letters must have their Roman or European values. The consonants have nearly all the same values in all European forms of the Roman alphabet. Only *c* and *s* have been seriously distorted. But there is no doubt that *c* should be kept and used in its Roman power, as in Anglo-Saxon, namely, as *k*. It should not be set aside in favor of *k*. But the latter acquired values of *c*, namely, *s*, *ts*, *tsh* (*ch*), *sh*, are to be set aside as distorted and ambiguous uses. *K* and *x* may stand, and non-ambiguous digraphs may be added. In spelling it is only the ambiguous that kills.

The vowels must have their Roman values, the same values, within narrow margins of variation, as they had in Anglo-Saxon, in Middle English, and as they still have, within like margins of variation, in the principal European languages of the present period. On this principle depends the whole alphabet. There can be no real simplification without it. Better, by far, the present spelling, than one based on the so-called "English" values.

The vowels must be called by the names which they had, and have, in Latin, which they had in Anglo-Saxon and Middle English, which they had in early modern English, and which they still have in some English dialects; namely, *â* (ah), *ê* (ay), *î* (ee), *ô* (oh), *û* (oo), as in *arm*, *eight*, *eel*, *old*, *ooze* (*rule*). The fourth name (oh) has run a full circle of change, and is now right again in the ordinary use. The vowels must not be called by the recent altered forms of their names (ay, ee, eye, you), acquired under a blind conformity to the general run of phonetic change. We may continue to use this barbarous English rigmarole, "*a*, *e*, *i*, *u*" (ay, ee, eye, you), but we are not allowed as rational beings to approve it. We must not use this rigmarole as a phonetic standard or basis, in the conventional spelling-book style—*ā* as in *fate*, *ē* as in *eve*, *ī* as in *isle*, *ū* as in *use*, etc, and then the same letters in what are imagined to be the corresponding short vowels, *a* as in *at*, *e* as in *ell*, *i* as in *ill*, *u* as in *up*, etc. That way madness lies. It is utterly wrong, unhistoric, unscientific, irrational, insane.

The only rational simplification lies in the regulation of the existing spelling upon the basis of the historic Roman alphabet, in its broad historic development. The Roman alphabet still lives.

Some may say "a simplification of English spelling is indeed desirable, but can it be effected?" Yes. The English language has itself endured without mortal shock many successive simplifications of its spelling. If time permitted I could tell a long tale of such reforms, from Anglo-Saxon and Middle-English times down to the present day. I can mention only a few modern cases.

About the year 1630 English spelling was simplified by the general adoption of the regulation by which the two unmeaning variations of the form of the letters *i* and *u* were differentiated in use, and the superfluous variations *j*, *v* were applied only to the consonant use, and named *ja* (*jay*) and *ve* (*vee*). It is worthy of notice that this simplification took place almost at once. It would be hard to find ten books printed before 1625 in which the regulation is observed. It would be hard to find any book printed after 1635 in which it is not observed. But that it was proposed as a reform, and then adopted by a few writers, and finally taken up, almost at once, by printers, is open to proof.

It is a remarkable fact that not only in the second edition of Holland's great translation of Pliny's *History of the World*, which appeared in 1634-35, but even in the first edition, which appeared in 1601 ("The historie of the world. Commonly called, The natvrall historie of C. Plinius Secundus. . . . The first Tome. Londini, Impensis G. B. 1601. [Vol. 2:] . . . The second Tome. London, printed by Adam Islip. 1601."), this regulation of *i* and *u*, with the restriction of the forms *j* and *v* to consonant use, is carried out (tho not in the index). The same is done also in Holland's translation of Ammianus Marcellinus ("The Roman historie . . . written first in Latine by Ammianus Marcellinus. . . . London, printed by Adam Islip. An. 1609."), and in other works. That is, Holland or his printer, even in the year 1601, had the head to determine and the courage to execute a marked simplification of English spelling. And the world came round in thirty years. Who is here so bold as to do, in this imperial year 1902, a deed as brave as that of Holland in 1601? Who is here so strenuous as to attack now, in the name of humanity, the more than Spanish superstitions of our English orthography? No gilded epaulets, no gorgeous trappings, no shouting crowds await the heroes of such a pale, bloodless war; but, nevertheless, greater is he that openeth a way unto wisdom than he that taketh a city.

Another simplification of English spelling took place about the year 1800, when the superfluous long *s*, which had long been used, without any special significance, in the initial position and in duplication, was dropped from printers' use. And how was it done? By "the spirit of the age"? By the process of "gradual improvement," no person whatever making any change in the thing to be improved? No. That is a popular method of reform among literary persons, but it effects nothing. The change was effected by a man. His name was John Bell (1745-1831). He was a printer and publisher, one of the first to bring out a series of established classics in good type and good style. He published the series of works known as "Bell's British Poets" ("Bell's edition; The Poets of Great Britain from Chaucer to Churchill," 1782-18—), and similar editions of Shakespeare and British plays "The British Theatre." He saw that the long *s* was a mere superfluity. One day he ordered his compositors and proofreaders to drop the long *s* and to use the short *s* thruout. And it was done. And other printers and publishers went and did likewise. And the next state of British orthography was better than the preceding. Need I point the moral? Is there any Bell here that, being struck by an idea, will vibrate in response and

> "Ring out the old, ring in the new, . . .
> Ring out the false, ring in the true"?

Another movement for simplification was that associated with the name of Noah Webster, tho many others on both sides of the Atlantic were among the agitators — first Franklin, and later Landor, Mitford, and others. This led to the partisan conflict between the favorers of the more simplified style, marshaled under Webster's name, and the adherents of the less simplified style, marshaled under the name of Worcester. I shall not enter into the details of the contention. The whole controversy was a tempest in a teapot. It is now practically settled. We know in America, at least, what we are going to do. We have climbed out of the teapot. The progress of science and common sense in other matters has had its effect upon spelling. We have openly or tacitly agreed that spelling must be simplified wherever it can be done. The dictionaries and the dictionary men all lean in that direction. The latest American dictionary is now always more liberal than its predecessor in its hospitality to the idea of a more scientific spelling. And I am in a position to know and to announce that the present publishers of the well-known *Worcester's Dictionary*, the unabridged, once the bulwark of the conservative spellers of the United States, do not intend to put forth a new edition of that work in its old form or with its old editorial views. The old Worcester is to be succeeded by an entirely new work, under another name, in several volumes, prepared in the scientific spirit, with the spelling, pronunciation, and phonetic notation presented according to the historic facts and the philologic method. Science and reason must prevail. "The old order changeth, yielding place to new."

I mention next the movement for a general reform of English spelling, associated with the names of Pitman and Ellis and many individual agitators in the phonetic and phonographic fields; the many sporadic but useful agitations kept up by insistent reformers who have preferred to ventilate the subject with their own private bellows; and last, the greatest and most hopeful movement of all, that associated with the name of the Spelling Reform Association and the great philological societies.

The history of this movement; the part taken by the American Philological Association and the Philological Society of England in establishing the principles of reform, and in settling the alphabetic basis and phonetic standard to be used (the Roman alphabet and Roman values); the organization of the Spelling Reform Association for the missionary work of spreading information and promoting the actual use of simplified spelling; the names of the eminent scholars, divines, educators, editors, presidents, governors, captains of fifties and captains of hundreds, who have applauded the idea of reform; the simplifying rules, the lists of simplified words, specimens of new types and new spelling, and all the bibliography and apparatus of the same — are they not all recorded in "Circular No. 8, 1893, of the Bureau of Education"? This pamphlet, one of the most enlightened works published by our paternal government, is written by Professor March, the Nestor, the Ulysses, and the Achilles of the spelling reform (*Salve, dux, philosophe, amice!*). It may be had for the asking. Ask for it. Read it. And then go and do it.

There is one special difficulty to overcome, in this as in other proposed reforms. Those who understand the matter approve the proposal. But those who do not understand the matter are opposed or indifferent. And they are the majority. And it is hard to move the majority. We do not like to criticise the majority. The majority keeps us in awe. It is the one tyrant we obey. In old times it was said, "Resistance to tyrants is obedience to God;" but we now see that this principle is not elastic enough to cover two hemispheres. At any rate we know that in a republic governed by the sacred law of party it does not apply to the great god Majority; therefore, "at what time" we "hear the sound of the cornet, flute, harp, sackbut, psaltery, dulcimer, and all kinds of music" (1611 Bible, Daniel 3:5) we "fall down and worship" the great god Majority. And it is thus, not alone in politics and in war, but in social life, in literature, in education, in spelling. We cannot bear to be in a minority, particularly in a small minority. We are impatient of independents, mugwumps, non-conformists, reformers — of all persons who refuse to wear party or "union" labels. We will excuse a man for being an independent, a reformer, once in a while, as in the summer, at college commencements and educational conventions, but he must not be independent in the fall, when the elections take place. That is "unpractical;" that is "un-American."

Now, with rational beings it is not so. Teachers, at any rate, must not fall down before the great god Majority. Their duty is to oppose, improve, and reform Majority. Their duty is to improve their pupils, and especially their pupils' minds. That means to change their pupils from what they are to what they are not; to save them from the popular tendency, from the general run, from the "passage broad, smooth, easy, inoffensive" down to general wrack and depravity, and lead them into the straight and narrow path, upward to the starry track, to the glimmering heights of reason, wisdom, self-control.

It is the duty, the ever-present duty, of teachers to resist the popular tendencies, to check the majority rush, to question the majority conclusions. They must favor and promote change, reform, amendment, simplification, reason. They must dissent. They must promote dissent. Assent is of course also necessary, but assent will take care of itself. It is not one of the neglected virtues. It is not a state of mind for teachers.

Teachers must think for themselves; and thinking commonly leads to dissent, change, reform.

There is another consideration, of world wide importance, in regard to the spelling of the English language. The English language is not the language of a single nation. It is the language of many nations. The "splendid isolation" of Great Britain, in which she managed, nevertheless, to interfere with the affairs of three great continents and a good many valuable islands, refers only to a diplomatic status. Great Britain is not disposed to seek an isolation in which she cannot reach out. She writes herself "I. R.," Imperatrix, Regina; and takes under her protecting wing many inevitable peoples. And that other "splendid isolation" in which a simple Puritan republic sat upon a lofty height and heard the lapping of two peaceful seas, has also been invaded by "manifest destiny" and other effective influences, and America has aroused herself to meet the problems which have been forced upon her, and also those which she has bought and paid for.

These great empires speak English. Already the uttermost isles of the sea have heard from either empire the strenuous accents of English, sacred and profane; and the heathen are made glad. But will they be glad when they see how you spell?

It is your task, in great part, to prepare those who shall hereafter introduce the English language unto the outlandish tribes of the earth. The march of empire has reached the West and the East. A condition confronts us. There *is* a "manifest destiny," even when it has been managed and maneuvered. We cannot escape it. In one way or in another we, the English-speaking peoples, shall have the isles of the sea for our inheritance. Wherever the conditions are promising; wherever commerce can be made to flourish; wherever the syndicate and the trust can find a lodgment for their banyan roots; wherever the heathen sits in darkness, yea, in gross darkness, upon valuable timber lands; wherever "Afric's sunny fountains roll down their golden sands"—there we shall be sure to hear, and to heed, the call "to deliver" those lands "from error's chains." It is true that for a time the deliverance will be dubious, and the rescue from error much like that of the man who was troubled with ecclesiastical doubts, and who, according to his zealous biographer, at length "abandoned the errors of the Church of Rome for those of the Church of England." But if the Lord hath given us "the heathen for our inheritance and the uttermost parts of the earth for our possession" (and it seems we have entered into our property), we must instruct the heathen in the way they should go; and they will go.

In this great work of civilization, the English language will play a great part. It will be much needed in explaining to a listening world the sweet reasonableness of manifest destiny in forcing us to plant our footsteps on the sea, and to expand the glittering generalities of the Declarathe cavities of resonance, strengthen the fiber of the vocal chords, and make firm by exercise the membranes of the throat and nasal cavities. It is a physical process to join easily the various parts of the speaking compass into flexible speech-notes. It is a physical process to learn so to control the vocal organs as to avoid breathiness and hollowness of tone. Clearness of tone-production, which comes from vocal exercise under careful direction, is a great saver of strength; for breathy tones cause too frequent respirations, result in overstimulation of the brain, and are therefore weakening. The same may be said of poor enunciation.. Where the organs of articulation are not held firmly in contact, there is a waste of tone and breath, and a consequent waste of vitality. We cannot strengthen articulation, lung power, and vocal power without benefiting the whole system, for it is a well-known fact that right speaking is a benefit rather than a detriment to the health. The late Doctor Studly, one of the most prominent Methodist divines, whose Bible and hymn reading were a revelation and who possessed the finest voice I ever heard in the pulpit, gained his power by daily practice in reading aloud. He once said to me: "I often begin a play of Shakespeare and read it quite thru before I awaken to the fact that I must be at my sermons."

On the other hand, the physical effects of wrong speaking are often disastrous. We have but to recall the numerous instances of ministers who have had to give up their work because of wasting throat diseases. What shall we say to one about to give up in despair for lack of vocal strength? Would you send him to a physician? Nine times in ten he should go to the teacher of oratory. It is not a course of medication he needs so much as a course in common-sense methods of speaking. Countless are the instances of men who, after having changed their methods of speaking, have been able to resume their labors and do more and harder work than ever before. Did you ever hear of a preacher's having to give up ordinary conversation with his family and friends on account of throat trouble? Had he employed in the pulpit a style of speaking based on conversation, and not sought some ethereal way of addressing his audience, there would have been little cause for his giving up.

But this state of affairs is not confined to the preachers. I myself can give testimony to the curative effects of proper vocal training. For eleven months, on account of wrong methods of voice-production taught me in the beginning, I was unable to pursue my chosen work, and should have had to give it up had I not then come under the instruction of the venerated Murdoch, to whose methods I attribute complete recovery. So what I am saying is not mere theory, but a conclusion reached by careful observation and a sad experience which enables me to give personal testimony.

Then again, bounding vocal health has a reflex action upon the spirits of the speaker, and in due proportion upon his audience. Recall the discomfort and the chagrin you have experienced when you desired very much to hear some distinguished scholar, who, for lack of voice and method, was unable to be heard. For this very reason Matthew Arnold was obliged to cancel his engagements to lecture in America. He could not be heard. The ring and penetrative power that sound vocal training would have given were wanting in him. These elements make it a source of pleasure to listen to a speaker, and the ease of listening reflects upon and stimulates the one speaking.

Another element, not so clearly physical, but yet so closely connected with our work that I cannot leave it unmentioned, is nerve-power, self-control. As public speaking is more or less a nervous strain, I hold it to be the duty of educators to know something of those simple laws which, if well followed, will avoid nervous waste and conserve the energies of the speaker. There are reckless public speakers, as well as reckless men in other walks of life. One of our most famous preachers today, when remonstrated with for doing the work of three men, laughingly remarked : " The men that have been advising me thus for the last twelve years are nearly all dead." But he is now paying the penalty of thus disregarding natural laws, and perhaps after a few more years of enforced rest he may regain sufficient vigor to go on with his work, but he can never quite reach his former powers. To the speaker, of all men, nerve-power is essential. What are some of the precautions that may add to the speaker's effectiveness ?

In the first place, in preparing an address, he should not study up to the last moment. The worry about a speech up to the time of speaking is one of the severest strains a man has to endure. It is not the speaking that hurts, it is the waiting for it, the awful feeling of expectancy. Carlyle once remonstrated with a neighbor for keeping peacocks that screamed so loud. " Why," said his neighbor, " they scream but about twice in twenty-four hours." " But consider the agony I undergo in waiting for that scream."

The day before a speech ought to be play-day. Saturday and Monday should be days of recreation for the preacher. They should be devoted to social, intellectual, and physical exhilaration. He should be out on the hills, in the woods, along the streams and lakes, in the art galleries, on the golf links, or watching college sports. The mind unconsciously collects vital force from the complete change. One gets condition without thinking about it, and that is the best kind of condition. The preacher, the lawyer, the orator, all would fare better by resting and by recreation before their efforts. A tired memory is like a tired horse. It is not alert and cannot be goaded into its best work.

The study of these physical elements is noble when undertaken with a view to rendering the body a fit instrument to serve the purpose of the heart. Fine speeches often accomplish nothing, for lack of physical force. Most persuasive men are of strong physical development, with good digestion and great lung-power, power to thrust truth out at men and give "lunge" to their speaking. It takes a vigorous, vital man to arouse and re-fashion. The best condition for eloquence is a perfect state of health.

Phillips Brooks declares that "the training of the full body is a part of that total self-consecration which makes one the medium thru which God may reach His children. Be alive, not dead. Do everything to keep the vitality at its fullest." Beecher says that "while it is important to train for thought and matter, it is only second in importance to train for condition," and Spurgeon once said: "I believe that everyone should train his voice and body, first, for the health it affords; second, for its educating effects; third, for the advantage it gives over others for usefulness."

I have spoken thus fully upon the physical side of our art, because I feel that we do not altogether appreciate that side. But what are the gains intellectually?

First, I believe that a knowledge of the underlying principles of public speaking is a mental development equal to and quite as useful as that offered by any of the liberal sciences. Correct speaking is based upon certain principles. These principles have been discovered and formulated by the pioneers of the art, and may be mastered and applied by young students. It is the heritage of the generations present and to come to reach results, not by accidental means, but by pursuing the philosophy of correct speaking. These principles may become as much a part of us as the principles of rhetoric or logic or music. And no one will say that these subjects are not founded on basic principles, and that it is not an intellectual accomplishment to understand them.

Then, the student of public speaking deals with general literature, and particularly with the master orations of all time. The study of a great oration leads him to seek the purpose of the speech, the historic events of the time, and the special occasion that called it forth; leads him to select and to commit those passages which embody the dominant thought, and that appeal most strongly to him. The delivery of these passages with a spirit aroused by a full appreciation of the circumstances that led to their utterance is nothing short of eloquence. I have heard such passages delivered by students who so transfused their spirit into my spirit that I have tingled from head to foot, and have felt that I could not have been more aroused by the orator himself. If such a man can grow eloquent with the words of another, he can be eloquent himself under like conditions.

Furthermore, a close study of master orations reveals their structure. The ability to discover the plan of a speech and put it into form is a step toward formulating one's own thought on some question of the hour. It stimulates the power to put things together, to deduce arguments and follow a chain of reasoning to its conclusion. This is progress in public speaking greatly to be desired, for it develops the logical faculty, the highest mental act. It should be remembered that our masterpieces of oratory are the best prose we have. Where is the prose on this side of the Atlantic that can match the speech of Patrick Henry in the Virginia convention, the Bunker Hill orations of Webster, Lincoln's Gettysburg address, Sumner's "True Grandeur of Nations," and Phillips on the "Murder of Lovejoy"? The walls of every schoolhouse in the land ring with these classics, and their phrases, like our national songs, become the highest expression of our patriotism.

Another highly intellectual process is the construction and delivery of speeches. This is purely creative. There is no higher intellectual accomplishment than to be able to convince men and move them to action. That is the gift that made Hamilton, Webster, Clay, and Lincoln supreme. That is the gift that today is helping men to preferment. The man that can speak well gathers clients. Whether in court or in Congress, the people place their affairs in the hands of the skilful advocate. And I believe it to be the duty of educators to strengthen this side of men, to contribute in as large measure as possible to the success of those professions that demand speaking. Schools and departments of oratory that neglect this side of expression should either abolish the name or come up to it.

Another advantage to be gained by training in public speaking is the development of style. Just as that style of delivery is the best which calls least attention to itself, so that literary style is best which is "least obtrusive, which lets thru the truth most nearly in its absolute purity." Involved, circuitous sentences, even tho rhythmical and well-balanced, tend to cloud the understanding and tax the attention. Beecher, in his lectures to Yale students, says: "Don't whip with a switch that has the leaves on if you want to tingle. I have known men whose style was magnificent when they were once thoroly mad. Temper straightened out all the curls and made their sentences straight as a lance."

I once heard the president of a theological seminary say to his students: "If you want to study style, go out and watch the boys play marbles. Their language is not always chaste or parliamentary, but it is direct and forcible and instantly understood." Emerson declares that the language of the street is superior in force to that of the academy, and bewails the fact that scholars do not convey their meaning in terms as short and strong as the porter or truckman. He says that the moment an orator rises to any height of thought or passion, he descends to the language level of his audience. This, I believe, is the very essence of vigorous style. The common people must be reached in home-bred Anglo-Saxon words, words that strike the imagination, words that awaken "ineffable and tremulous memories."

Students of spoken English must be taught these elements of power, must learn that constant writing and extemporizing are necessary to a perfect style, must practice for rhythm and cadence that the idea may get off the tongue properly; must learn that compactness of style, stopping short of the dry or the diffuse, is devoutly to be wished; that there should be variety of style to rest the audience; that wit and humor should intermingle with story and fact, illustration and experience with exposition and argument. Better than a dead level of argument is to get the mouth open with a laugh and then thrust in a chunk of wisdom. That is a duty educators owe to the audiences to be addressed in future years by those under their instruction. Viewed in the light of the pleasure and profit to audiences who might otherwise turn a deaf ear to instruction and appeal, there is no other name to be applied to the making of effective speakers than philanthropy.

I would name, also, the cultivation of the imagination as another of the values of training in spoken English. By associating the mind with the best thought of the ages, by dwelling upon the most striking passages, by committing and reciting the parts that most strongly appeal to us, by attempting to embody in our own writing some of the elements of beauty contained in the masterpieces, we develop in a high degree the imagination, the literary faculty, the memory, the love of the beautiful. The ability to clothe in appropriate language the imagery of the mind grows by what it feeds on. This ability is aroused by the responsibility of facing an audience and by the audience itself; and while I do not believe in extemporaneous acquisition, I do believe that the stimulus of an audience puts one in fuller command of his resources, arouses the memory to produce facts, incidents, and illustrations long since apparently forgotten.

So much for the physical and the intellectual. Now, what is the value of our art to the moral growth of the student?

Much that I have already said bears directly upon this part of my remarks, for I believe there is such a thing as physical morality, that the care of the body necessary in reaching the highest usefulness in public speaking ought to be a matter of conscience with him who loves his fellow-men and desires to elevate them. What I have said, also, of the intellectual is so closely interlaced with the moral that I have found difficulty in determining where the one ends and the other begins.

First, I would urge the study of human nature. You who would persuade men must study their lives, their needs, their motives, their purposes. You who would lead men must gain their sympathy, must find out their hearts. Men differ so widely we can only know them by mingling with them, by studying their actions, their social habits.

Nobody was ever injured by getting close to the toilers. They can all teach us something. How else can we interpret their feelings and soften our own hearts? Were Patrick Henry, James Otis, John Bright, and William McKinley ever hurt by getting close to the people? This sympathy with the masses makes men forgetful of themselves; makes them come before audiences with a message, not a performance; makes them go straight for the hearts of men. The moment a man begins to think he is speaking well he weakens his speech. No speaker ever began to observe his tones and gestures without losing sympathy. Many an oratorical contest has been lost because the student thought more of the prize than of the message. Men should care less for the speech and more for the truth. Those are happy moments when men go clear out of themselves in driving home the truth.

This desire to be helpful, this love of the audience, is a great source of moral strength. High respect for those under our teaching calls for the best we have, and the best is never too good for the people. Not only does the study of living men awaken sympathy, but the study of characters in literature and history arouses that love for men which leads us to seek the sources of human action and adapt the truth to their needs.

The last of the points I will consider is the development of personal character. The association of the mind of the student with the best minds in literature is a course in character-building. The putting down of the bad, the exalting of the good, the retribution that comes to the guilty, and the contentment to the faithful, all tend to develop personal strength, manliness, courage, and nobility of character. The responsibility of leadership arouses men to their best efforts; makes them discard habits of thought and action which lose respect and leadership; makes models of men; makes them strive to be what they would be thought to be. This is character-building, and character is the basis of oratory, for speech is valued by the character of him who speaks. As President Thwing puts it: "In order to make oratory beneficent, persuasive, larger, richer, finer, we must make a richer and finer and nobler character in the speaker himself. Therefore our common work in making speakers is also the divine work of making men."

The work of education in this art, then, is to bring men to higher physical, intellectual, and moral levels. If education is power, then there is no work that yields more abundantly than sound training in public speaking. The gift of persuasion distinguishes man above his fellowman. It makes him sought in public assemblies, it opens avenues to preferment; property interests seek him as their advocate, legislative assemblies call for his wisdom. He becomes at once a leader of men. Is it not then a laudable ambition for our youth to strive to perfect the greatest power among men—the gift of eloquence. And is it not our duty as teachers to foster this spirit and in every reasonable way aid those under our charge to gain a fluent and correct use of spoken English?

DISCUSSION

SUPERINTENDENT CARROLL G. PEARSE, city schools, Omaha, Neb.— I find myself feeling this morning a little bit like the boy who stood on the burning deck. It is a very big task — one to which I do not feel at all adequate, to open the discussion upon three such papers as we have just listened to, one by the head of the educational system of the United States, one by the etymological and philological editor of the leading dictionary of our language, one by a man so thoroughly versed in the theory and the art of public speaking as Professor Trueblood. I can assure you that nothing but a somewhat prolonged habit of obeying orders keeps me from following the example of Dominie Sampson, and fleeing incontinently.

For very good reasons, which I will not mention here, I did not write Dr. Harris for the subject-matter of his address, and will not attempt to discuss it. It is evident that by individuality we may mean one or the other of two things: first, those characteristics and qualities which render a person unique, singular, unlike any other person, possessing and showing those qualities which are peculiarly his own. This sort of individuality is not fostered by schools or by association with men, his equals, but is most perfectly shown forth in those who are much in solitude, or who are associated with those who exercise upon them little control or restraint: farmers, plainsmen, hunters, explorers, men who, removed from much of the constraint and pressure exerted upon us by our fellowmen, develop in the direction, and in accordance with the urgings of the powers and inclinations within them. In its other use individuality signifies that the person possessing it is strong in those qualities which enable him to act as an independent individual, maintaining his own standards and carrying out his purposes in the midst, perhaps in spite of throngs about, and of distractions and conflicting or adverse influences. This individuality is bred in the midst of throngs and can flourish nowhere so well as in the presence of a man's equals; this individuality it is important that our modern education should give, and it should be a part of the learning of our schools, as Dr. Harris has so lucidly shown us that it may be.

As to the simplification of our spelling, it has been a pleasure to us all to listen to Mr. Scott's very scholarly paper. Most of us know much more about the subject than we did a short time ago, and I am not disposed to take issue with him on his main proposition, that the simplification of our spelling is a present duty. I am not at all sure, however, that it is the duty of the National Educational Association to undertake it, or to pronounce upon it. Our spelling has gradually grown simpler for hundreds of years and will, I have no doubt, continue to do so through time to come. Violent changes in our spelling, like violent changes in our laws, do not suit the humor of the English race. These reforms of spelling must grow upon us. The etymologists and the philologists and the spelling reformers must keep these things before us — keep them in our presence, until we have time to become accustomed to them. We shall then take up such of them as approve themselves to our judgment and, if you will, to our sentiment. When this has come about, our lexicographers will put them in our dictionaries and the thing is done.

If the United States might have a royal commission to pronounce upon our spellings and the pronouncement could be enacted into a statute so that all publications would use the spellings adopted, probably all of us, after a few years of grumbling, seeing these forms day by day, would fall in line and the thing would become universal. But such a settlement is so unlikely as hardly to be worth mentioning here. And unless such a commission, with authority, can be had, there remains only the plan so far in use. The philologist and the etymologist and the spelling reformer show us their improvements. We view them and adopt those we like. Once in a decade or so some one publishes a new dictionary, or a new edition of an old dictionary, which shows us the point to which this reform has actually advanced at the time of publication; for a dictionary is to mark what *is* accepted good usage, rather than what the editor thinks would better be accepted as good usage.

Mr. Scott and those who labored with him rendered us inestimable service in the preparation of the *Century Dictionary*, that great work in whose making he had so important a part. We shall await with interest the appearance of that other great work upon which he is now engaged.

It appears to me, however, that we are here as an educational Association to listen to specialists in many lines, and to advocates of many reforms, but that we do this as a means of information and a stimulant to our own thought, rather than for the purpose of pronouncing upon the specialties, or indorsing the reforms. In a few cases we have been swayed out of our orbit — stampeded, so to speak — and have pronounced upon, or assumed to indorse, things we were not particularly well informed about; but I do not believe the habit should be strengthened or become confirmed.

Coming to Professor Trueblood's paper, his advocacy of the art of public speaking has given me the greatest satisfaction. He has dealt with it from the educational, the philosophical—the platonic side; I want what little I shall say to be from the dynamic side, that we may go from here back to the schools where we have duties and do what Professor Trueblood has told us 'twere well to do.

The art of public speaking has fallen much into desuetude, and certainly our teaching of it in the schools has fallen into that dismal state. It is a question whether there ever was in the history of education so general a neglect to teach the art of public speaking as has marked the schools for the few decades past. The Greeks and Romans taught it as an essential part of a man's education; the knight of the Middle Ages must be able to make a good speech upon occasion; in colonial times and in the early days of the republic the spoken word inspired the sentiment and shaped the opinion of the people; even our native Indians taught public speaking as a necessary accomplishment for any man who would be somebody. Yet for a quarter of a century the schools have more and more neglected this art. Much of this neglect has doubtless been due to the wide use of the newspaper. Men could sit in their homes and read both the news and the arguments made in support of public measures and public men. The rostrum was no longer the only or the chief means of presenting questions to the public. This being so, more and more attention was given to the newspaper, and less and less to the older means of reaching the people.

In college and university life the literary society and the debating club once provided the social life of the students, as well as a means of intellectual and forensic training. For many years the growth of college fraternities has given impulse to the social life, but at great expense to the development of the art of public speaking. Even upon graduation day in the high school and at commencement time in the colleges, the student has often of late been relegated to the rôle of a listener, and instead of presenting to the assembled friends his best thought in his best style in the time-honored oration or debate, he has adorned a rear seat upon the platform while some man, often a noted or eloquent man, has delivered an address "before" the graduating class.

But I think the pendulum is returning. There are signs that this is so. In the universities changed conditions are being met by classes in which the art of public speaking is taught; in the high schools the formation of debating clubs and literary societies is being fostered; inter-collegiate and inter-scholastic debates and oratorical contests are becoming more and more common.

And should not this be so? Few things are more important than this art of arts. Has it not ever been the spoken word that has moved the world? The man of Galilee as he taught among the hills of Judea did not distribute his sayings in writing among the throngs who came out, but when the multitude was gathered together he opened his mouth and taught them; Martin Luther did not stop when he had nailed his theses to the cathedral door, but thundered from his pulpit to the multitudes against the sins of the church of his day; Peter the Hermit did not issue a circular summoning men to join his crusade, but moved about among them and with his presence and voice set their hearts on fire to rescue the tomb of their Lord from the sway of the Moslem; Patrick Henry did not issue an appeal in the "News Letter" of his day, but face to face with the men of Virginia he kindled in them the determination to dare all that they might be free; when our conception of the national integrity tottered to dethronement and men were pale with dread as to how the issue might be, Daniel Webster stood upon the floor of the Senate of the United States and face to face with the men who would belittle our national ideals and break down the integrity of our national standards he spoke the words that restored confidence to all friends of the Union and fixed the true conception of that Union in the mind of the nation.

Knowledge may be spread and information conveyed by the book, the periodical, the newspaper—by the written word; but was ever a great movement of the people, social or political or religious, roused and led but by a voice — by some man earnest and eloquent, who stood face to face with the people and moved them to act?

And who are and have been leaders among us in the time of our immediate knowledge — not necessarily the office-holders, but the real leaders in statecraft, in the world of organized labor, in great social and industrial movements — the men who shape thought and influence action? Are they not the Beechers and Moodys, the Debses and Mitchells, the Bryans and Wattersons, the McKinleys and Roosevelts and Dollivers — the masters of the spoken word?

Then shall we not teach this art in the schools? Not all our pupils can become great or perhaps even forcible speakers, but the doors of opportunity can be opened for all, and both the country and the students will be the gainers by the timely and forcible discussion of public questions which this training will make possible.

E. O. VAILE, editor of *Intelligence*, Chicago, Ill., being called out, responded substantially as follows:

Mr. Pearse is exercised for fear this organization may do or say something that is out of its province. His anxiety is shared by other members of this Association. Their idea seems to be that we should gather at these large annual meetings and deliberate and discuss concerning vital problems of education, and then take care that the world shall not know anything about our conclusions.

I do not agree with this view of the function of this body, and I do not believe that the majority of us agree with it. This Association owes it to itself, it owes it to the children of the land, to be a progressive and efficient agent in helping to crystallize public opinion aright on all educational questions. Both its duty and its dignity require it to canvass all such matters carefully and deliberately and then to formulate its opinion and give it to the world. If this is not our duty, will my friend Pearse tell us what we are here for? Why is it that we regularly appoint a committee to formulate our "declaration of principles"? Why do we seek admission for these resolutions into the daily press, and why do we feel that our cause is slighted if they are ignored? Clearly the sentiment of the Association is in favor of a distinct enunciation of its position on every debated educational point as soon as it knows what its own position is.

At this meeting here we have already had before us three live and important subjects, and discussed in a most able way — Dr. Butler's discussion of two important problems, Mrs. Catt's plea for the encouragement of higher education for women, and Secretary Wilson's argument for the teaching of agriculture in the rural schools. Is this body of educators going to ignore these subjects and not let the country at large know what it thinks upon each of them?

Of course, if it has not made up its mind yet upon any one of them, that is to say, if there is evidently in the Association no unanimity of sentiment on a subject, no expression can be made. But on every mooted educational question the time must come when this enlightened body by discussion will reach substantial agreement. As soon as that time comes the Association fails in its duty if it does not let the public know where it stands. It is asked, What do our resolutions amount to? Well, suppose they do not have as much effect as we could wish? They certainly do have some weight with the community, and we owe it to ourselves and to the great interests we represent, to speak out when we are fairly agreed, and let those hear who will.

Now, consider this matter of simplifying our spelling, a question in which teachers should be and are especially interested, realizing daily, as they must, what a painful and stultifying burden upon childhood our irregular spelling is. We have just heard from this platform a plea in behalf of both child life and adult life from one of the foremost students of etymology in the world, the man who had charge of the etymological department of the *Century Dictionary*, that monument to American scholarship, and who today is editor-in-chief of the great new forthcoming edition of Worcester. In his address he has spoken not only for himself but for the whole body of scientific philologists, both in England and America, including Max Müller, Dr. Murray, Dr. Skeats, Dr. Ellis, our own Professor Whitney, Professor March, the whole body of them without an exception. Not only so. While as an expert in the special department concerned he makes this strong plea, he likewise speaks for men eminent in letters and science, such as Tennyson and Darwin, both of whom were earnest advocates of reform, both serving for some years as vice presidents of spelling-reform associations; W. E. Gladstone, the eminent statesman, who was very outspoken in support of the cause; Bulwer Lytton, who was just as outspoken; Bishop Thirlwall, John Stuart Mill, and a long list of like eminent men. The eminent men of letters in our own country, whose sentiments Professor Scott has voiced, are such as Whittier, Charles Sumner, Chief Justice Waite, Andrew D. White, Professor David Swing, Dr. W. T. Harris, W. D. Howells, Brander Matthews, Dr. William R. Harper, Dr. Nicholas Murray Butler, and many more. The arguments in favor of the reform are simply unanswerable. There is absolutely no valid argument against it, except the inconvenience of making a change. Can there be any doubt as to how this body of teachers stands or is going to stand on this question? Are we going to continue to have it said to us that this is not a proper subject for this Association to express itself on or take an active interest in? I hope not. When the time comes that this cause can command the support of a fair majority of this body, in the name of justice and humanity let it speak out. Let it say to our people that the majority of the teachers of this country believe that our lawless, inconsistent spelling ought to be and can be rectified, and that they are ready to support all moderate and reasonable steps to that end.

Think for a moment where the weight of this Association ought to be thrown at this moment, and what effect it might have in regard to the teaching of English to the Filipinos. We know what our illogical spelling costs us and our children; how it stands in the way of the foreigner who comes to our shore and his children, and retards the Americanizing of them; how it handicaps our foreign missionaries in their efforts; how it keeps the noblest and easiest language under the sun from quickly becoming the world-language. Now, in the Philippines there are eight million semi-barbarous people, each tribe speaking nothing but its own local language or dialect, and this whole population, by inevitable natural laws, is bound to remain in a disintegrated, unnationalized condition until it comes into possession of one common universal tongue. This question of language is the great obstacle in the way of a general administration of law among them. In the judgment of all who have to do with the civil government of these islands, the one most important and essential thing that we can give these people is to give them our language, our speech (and mind you the English speech is speech, is what we utter, not writing). It is chiefly because of this political or administrative necessity that we are sending the American teacher twelve thousand miles to them and requiring them to pay him (or her) out of their own pockets to teach them to talk English. Yet, so far as the printed form is concerned, we are giving the English tongue to them in the same antiquated, irrational, oppressive spelling that we use ourselves. Think of the responsibility that rests upon us in regard to these people; think of the inestimable advantage it would be to them to acquire our language quickly and easily; think of the opportunity we now have to give it to them in an easy, improved, consistent spelling, so that the mastery of our printed English would be a simple, logical process, easy both to child and adult, and thus contribute to their mastery of spoken English. Then think of sending our teachers, and the great expense entailed, to have them labor and waste time and strength over the same petty abominations of English spelling that cause so much worry and discouragement for our own children, and which must have the same effect among the Filipino children, besides retarding the development and progress of the whole people.

Is it not absurd ? Is it not cruel ? If this Association were alive to the situation would not an expression from it touch our people ? Could it escape the duty ? The constitution of this body declares that one of its objects is "to promote the cause of popular education." Can any man name any one thing that would do more to promote the cause of education, both among ourselves and among our island wards, than the rationalizing of our spelling ? Of course he cannot. How, then, can anyone say that the active support of this cause by resolution, or by example, or by devoting some of our funds to help guide the movement along sensible lines, would be outside of the proper sphere and function of this Association ?

EDUCATIONAL CONDITIONS AND PROGRESS IN CHINA

DR. C. M. LACEY SITES, SECRETARY OF THE EDUCATIONAL ASSOCIATION OF CHINA AND SPECIAL DELEGATE TO THE FORTY-FIRST ANNUAL CONVENTION OF THE NATIONAL EDUCATIONAL ASSOCIATION, SHANGHAI, CHINA

Ladies and Gentlemen of the National Educational Association :

I feel myself in duty bound, first of all, to acknowledge the courtesy of your committee in inviting me to present in person, from this platform and in this presence, the greetings which I bear from the Educational Association of China.

It is but six weeks today since I left Shanghai ; and it was only a week previous, and at the same port, that the Educational Association of China closed its fourth triennial meeting. Something in the atmosphere of that meeting seemed to speak of large sympathies. Western education in China has not yet outlived the enthusiasm of youth. A magnificent empire awaits its conquest, and the vision of victory looms large in the soul of the teacher, tho he well knows that as yet the battle is but begun.

The resolution, in pursuance of which I stand before you tonight, directs me, in presenting to you the cordial greetings of the Educational Association of China, to add "the assurance that, under the difficult conditions which beset us in China, we are striving to advance the interests of true education, and are meeting with results that give us the highest hope for the future."

We come to you, teachers of America, to gain the inspiration of your highest ideals, and to find the strengthening that comes with sympathy and the consciousness of a common purpose.

China, it may be, has become a trifle trite as a topic for discussion in

America within the past two years; and, worse yet, anything in the way of information emanating from Shanghai is, I regret to learn, subject to rigorous sifting before being acceptable as the simple truth. But, my friends, the war is over; the yellow journalists have mostly gone away; a period of reconstruction has begun. But reconstruction in China is a tedious process, because very little of the old structure is ever torn away at one time.

The part taken by the United States in that war, which diplomacy still regards as an unbroken peace, was only less distinguished and honorable than her part in the diplomacy which, in 1900, saved central and southern China from the terrors of war, and which still interposes its strong hand, unarmed save with the might of conscious rectitude, between China and the spoliations of peace.

I cannot forbear, in this presence and in this city, which by its heartiness has won our hearts, to link with the name of John Hay, whose diplomacy always wins because it is always right, that of John Goodnow, our accomplished consul-general at Shanghai, whose diplomacy must be always right because it always wins—diplomat, man of business, and an American to the core.

I have said that reconstruction in China has begun. In no branch of government has the reform movement shown more signs of promise than in education. But reform and progress in China are only relative terms. Like the movement of a glacier, they can only be measured at considerable intervals of time. To appreciate the recent reform edicts of the Chinese government, we must go back at least to the attempted reforms of 1898. Turn to the record of the acts of the imperial government, as inspired in that year by the arch-reformer Kang Yu-Wei, and you will be struck first with the remarkable fact that they are almost identical with the edicts of last year. There was the same denunciation of abuses in civil service examinations, the same order for the abolition of the classic essay and for the substitution of tests in modern science, politics, and history. There was the same provision (on paper) for a national school system, in which western subjects should have a place, grading down from the Imperial University at Peking and the colleges in provincial capitals to secondary, elementary, and primary schools in every town and village.

At the famous *coup d'état* in September, 1898, the empress-dowager, representing the conservative element, locked up the emperor in his palace prison, and, taking the reins of government again in her own hands, checked the mad career of progress. Then the reactionary movement, insane with its own success, gained strength until it culminated in the Boxer outburst of 1900. And here we are met by a second remarkable fact—that the reform edicts of 1901 were put forth by the same empress-dowager who defeated reform in 1898. No such reforms were demanded by the foreign plenipotentiaries who prescribed the terms of peace at Peking. The bitter lessons taught by foreign invasion and foreign exactions of indemnity induced this voluntary repentance, the acknowledgement that western nations had sources of power which China had not and which she had urgent need to seek.

Herein is one element of promise, that these edicts, providing for educational and administrative reform, are put forth by a party at court which represents conservative opinion. The element of doubt in the situation lies in this, that in China legislation and administration are almost absolutely divorced—especially when the new law is an imperial law whose enforcement must depend upon provincial and local officials.

The results of these edicts are difficult to define with precision. The most salient characteristic of Chinese social life is its inertia, in both physical senses of the word; it shows a readiness to respond to impulses in the line of its prejudices and superstitions, as seen in the facility with which a demagog can arouse a mob; and it shows a painful deliberation about putting in practice any new régime which does not give clear promise of material advantage.

Another notable characteristic of Chinese culture is its delight in putting forth perfect precepts, expending all its moral energy in formulating rules and reserving none for the enforcement of them.

Nevertheless, some hopeful beginnings have been made toward carrying out the educational scheme of the government. For many months the *Peking Gazette*, the oldest governmental organ in the world, has contained, in nearly every issue, some new report or order concerning schools, examinations, or the sending of Chinese youth abroad for western education. The viceroys and governors in all the provinces have reported their plans for provincial colleges and schools of lower grade. Some of these institutions have already been inaugurated. Most of you have heard of the college established at Chi-nan-fu, the capital of Shantung, by the governor, Yuan Shi-kai, who has since become viceroy of the metropolitan province of Chih-li. He called to the presidency one of the leaders of our educational association, Dr. W. M. Hayes, who had been for years president of a large American mission college in the same province. The regulations of this new provincial college, as organized by Dr. Hayes, have been sent out by imperial edict as the model for all the other provinces.

Since his promotion to Chih-li, Viceroy Yuan has established a similar college in that province, and has called to the presidency Mr. C. D. Tenney, an American of long and successful experience as an educator in North China. In addition, he has taken the remarkable step of appointing Mr. Tenney inspector of schools for the province—a step which, if the progressive viceroy is not balked by conservative influences at court, is likely to lead to momentous consequences. It presages, in fine, the establishment of a trained, English-speaking supervisorate over the newborn public-school system of China.

While on a visit to Peking in February last I had the pleasure of seeing the inauguration there of a government secondary school under the new régime. It is maintained partly from provincial and partly from city funds; but its special patron is the governor of Peking, Chen Pi, who has often been denounced by the foreign press as notoriously reactionary. The school was opened in modest quarters, but the old Chinese buildings had been neatly renovated and equipped with desks and blackboards to accommodate eighty students in the first-year class. These students are selected by competitive examination, and devote five days of the week to English subjects, including the sciences. The course is laid out for six years. The teachers are all natives; the director of English studies is a Chinese gentlemen who is also an English scholar, a graduate of Greenwich, England.

Other examples might be given. I have merely sought to show that educational reform by governmental action in China is not a myth.

Still more significant, perhaps, because more indicative of general sentiment, is the establishment of schools by private, or semi-official, initiative. Scores of schools, and a few so-called colleges, for the special teaching of western languages and sciences, have been endowed by the gentry and officials, some of them before the recent reform edicts, but most of them since. Some, like the Nanyang College at Shanghai, and the former Tientsin University and Imperial University at Peking, have a number of foreign specialists on their staff of instructors.

But self-activity is the all-important thing; and nothing I have seen in China interested me more than the Industrial School at Peking, which is purely Chinese and entirely unofficial in its endowment and its management. It was founded by a Chinese gentleman of wealth and of aristocratic birth — and aristocracy in China implies scholarliness — a man who some twenty years ago won the supreme prize of scholarship of the empire, the "optimus" in the palace examination of the Tsin-tze or Doctors of Philosophy. Associated with him in the conduct of the school is his son, who, traveling abroad as an attaché of legation, not only learned our language, but became imbued with our ideas of industrial training. The manufacture of *cloisonné*, of furniture, of rugs, the printer's trade, and I know not how many other trades, are here taught to men and boys of the poorer class, who thus are trained to self-support. Here is duplicated in China, by Chinese, the same ideal of a practical philanthropy and enlightened patriotism which inspires a St. Bartholomew's Mission or the Educational Alliance in New York, or an Armour Institute in Chicago.

If, thus, we find some activity of government and of private initiative in educational organization, what of the attitude of the people? As to the regard in which learning is held, in the abstract, the question is not worth the asking. There is not a nation where scholarliness is held in higher honor. The significant thing is the attitude of the public mind toward the new learning. And in this, there is no mistaking the facts. I hold in my hand a letter from a missionary in the far western province of Szechuan, addressed to the manager of a publishing house in Shanghai, who permitted me to copy it. This letter came overland 400 miles to Chungking, then down the Yangze by boat, taking longer to go from Chentu to Shanghai than it took me to come from Shanghai to New York and back again to Minneapolis. Let me read an extract or two:

> DEAR MR. ———.—Herewith another order for books. Please note especially that calling for 200 copies of Chapin's *Geography*. Yesterday 30 copies of Chapin arrived, part of my order for 100 by telegram. They are going like hot cakes, all for cash, and at a good profit. There seems no earthly use in getting up small orders of standard books—they are only an aggravation to the people. There is a wild scramble for a few hours or days, and we get blamed for not bringing a decent lot while we are at it. It is exactly the same with regard to these English-Chinese *Primers* and *First Readers*. I am afraid this telegraphic order for 80 copies won't last a week. I haven't advertised anything yet, except magazines—what will it be when I begin to advertise books? There were only 195 copies of the *Review of The Times* [1] in my last lot; if there had been 250 copies I could easily have disposed of them.

This same Szechuan missionary, who is only one of hundreds of such disseminators of knowledge, unable to await the slow process of freight, has recently ordered four lots of books sent by mail, on which the postage alone amounted to over $320.

This is but an example of the intellectual quickening, all over China, of the desire for western knowledge, thru the medium of translations. The native presses of Shanghai are working to their utmost capacity. The Presbyterian Mission Press has now fifty new books in hand, and has its whole capacity engaged for six months ahead. One important element in the supply comes thru Japan, where, as you know, a large variety of western books have already been translated into the vernacular. The Japanese book-language, having in it a considerable element of Chinese, is much more readily turned into Chinese than western languages; and large numbers of Chinese books are appearing, translated from Japanese translations or compilations.

Native newspapers and periodicals, published under native auspices and treating of current themes, are now read in all the sea and river ports and far inland. I suppose there are now no less than fifty dailies published in Chinese. Their telegraphic news is frequently in advance of that of the foreign press, and their editorial comments on public questions are, in many cases, as trenchant, as rational, and as keen in historic citation as those of any metropolitan journal in America.

I need not add, after what I have said of the demand for modern books and newspapers, that the schools are filled. At all the colleges the applications for admissions each year are far in excess of the capacity of the institutions. This is true of both the great lines of the new education, viz., the acquiring of English, especially by the younger students, as an instrument to further acquisition ; and the pursuit of modern knowledge, thru the medium of translations, by those who are too old or have not the time to master English first. Unquestionably, however the government may vacillate, the people are fronting the light ; and in this new educational activity China is again proving her inherent constitution as a democracy — the people rule.

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[1] This is a semi-monthly review of current events published by a missionary society; two weeks later the order from Chentu had increased to 400 copies.

And, here, my friends, I reach the special theme of my mission to you — the work of the Educational Association of China. It had its germ in a committee of missionary educators known as the "School and Text-Book Series Committee," organized in 1877. In 1890 it was reorganized under its present name, and holds a national convention once in each triennium. Nearly all of the fifty-odd missionary societies now operating in China are represented in it, its membership comprising English, Americans, and Germans.

As might be inferred from the circumstances of its origin, one prime element in the association's work has been the preparation and publication of suitable text-books of science in Chinese. Its book sales—quite apart from those of other agencies—have amounted to more than $27,000, of which nearly half must be credited to the last three years ; the stock on hand December 31, 1901, was valued at $13,336.

Another peculiar field of activity grew out of this publication work. In promoting the preparation of scientific text-books in the vernacular, the association found itself confronted with the problem of framing technical terms for a language which was wanting in most such terms, and which is also wanting in precision. Committees on uniform terms in science and on proper names in history and geography have done most laborious and valuable service, the former committee reporting, at the recent triennial meeting, the preparation of a list of no less than twelve thousand terms, covering all branches of science. Finally, another peculiar problem is that of the Romanization of the Chinese sounds ; that is, the expressing of them in the quasi-phonetic symbols of our alphabet, which has been taken up with zeal and intelligence ; this subject was, in fact, the one which claimed the greatest interest at the meeting this year, for, when properly worked out, Romanization goes far toward taking from the Chinese mind a weight of memoriter drudgery which has been no insignificant factor in checking its progress.

The association at its recent meeting directed its executive committee to prepare a memorial to be presented to the various mission boards represented in the .field, appealing for trained specialists to be sent out expressly for educational work. Normal schools are being called for to educate the rising teachers. Primary education needs a few trained specialists, who will conduct model schools for imitation by the Chinese. The great demand now in China is for a trained native teaching force, and this requires the best teaching ability of the West. China's educational system is in its nascent period. Our association, by providing, thru its various institutions, both the supply of teachers and the best general ideals of educational organizations, is in position to influence profoundly the coming Chinese system of national education. In this great opportunity and responsibility we invoke your interest, and, for the inspiration which we have already gained from you, we tender our grateful acknowledgment.

DEPARTMENT OF SUPERINTENDENCE

CHICAGO MEETING, 1902

SECRETARY'S MINUTES

FIRST DAY

MORNING SESSION.—TUESDAY, FEBRUARY 25, 1902

The Department of Superintendence was called to order in University Hall of the Fine Arts Building, Chicago, Ill., at 9:30 A. M., President G. R. Glenn, school commissioner of Georgia, in the chair. Prayer was offered by Dr. W. F. King, president of Cornell College, Mt. Vernon, Ia.

Professor Paul H. Hanus, of the department of theory and practice of education, Harvard University, read a paper on "Obstacles to Educational Progress." The discussion was led by W. K. Fowler, state superintendent of public instruction, Lincoln, Neb.

Superintendent E. G. Cooley, of Chicago, then read a paper on "The Value of Examinations as Determining a Teacher's Fitness for Work." The discussion of the paper was opened by W. W. Stetson, state superintendent of public schools, Augusta, Me. Others participated in the discussion, as follows: Miss Margaret A. Haley, of Chicago; Superintendent F. Louis Soldan, of St. Louis; Superintendent Charles R. Skinner of New York; Superintendent L. E. Wolfe, of Kansas City, Kan.; Superintendent J. F. Keating, of Pueblo, Colo.; Superintendent J. M. Greenwood, of Kansas City, Mo.; Superintendent C. G. Pearse, of Omaha, Neb.; and Dr. E. E. White, of Cincinnati, O.

The committee appointed by the department at its session in Chicago in 1901, on constitution and by-laws for the department, made a report thru its chairman, Superintendent Aaron Gove, Denver, Colo., as follows:

STATEMENT

In the absence of a constitution, the Department of Superintendence has had a varying policy, and its early aims and purposes have been frequently forgotten. Special committees have been created from time to time to do certain things which would have been done better by permanent constitutional committees changing but part of their membership annually. The president of the department has had no constitutional guide, and the programs have frequently reflected the personality of the president rather than any established aim and policy of the department. In inviting attendance of all classes of teachers the tendency has been to offer programs that scatter discussions over all classes of educational topics rather than to the concentration upon topics relating to supervision. The conviction of the committee is that the department should withdraw from this practice of scattering its efforts, yet continue its policy of welcoming to its meetings all who are interested in the discussion of the problems of superintendence.

PROPOSED CONSTITUTION FOR THE DEPARTMENT OF SUPERINTENDENCE OF THE NATIONAL EDUCATIONAL ASSOCIATION

ARTICLE I—NAME

This organization shall be styled the DEPARTMENT OF SUPERINTENDENCE OF THE NATIONAL EDUCATIONAL ASSOCIATION.

ARTICLE II—MEMBERSHIP

Active and associate members of the National Educational Association who are engaged regularly in supervising educational work, as state, county, city, district, town, and village superintendents, including assistant and associate superintendents, may become members of the department upon signing the constitution and by-laws, providing that active members of the National Educational Association only shall have the right to vote and to hold office in the department; also providing that nothing in this section shall be so construed as to deprive in any way those who are at present active members of this department from taking part or participating in and sharing fully the duties, responsibilities, and privileges of such membership.

ARTICLE III—OFFICERS

1. *Officers.*—The officers of this department shall consist of a (1) president; (2) first vice-president; (3) secretary. Each to serve one year.

2. *Executive board.*—An executive committee of five, consisting of the president, first vice-president, secretary, the retiring president of the department, and the permanent secretary of the National Educational Association.

3. *Committee on nomination.*—A standing committee of seven on nomination of officers, consisting of the president of the department as chairman *ex officio*, and six members to be elected by the department, whose term of office shall be three years, the terms of two members expiring each year. The terms of service on the first election shall be determined by lot. It shall be the duty of this committee to nominate one or more names for each vacancy to be filled, and to report to the department at the close of the morning session of the second day of the annual meeting.

4. *Committee on program.*—A standing committee of five on the annual program, consisting of the president of the department as chairman *ex officio*, and four members to be elected by the department to serve two years, the terms of two members to expire each year. It shall be the duty of this committee to prepare an annual program and supervise its execution. Only subjects directly relating to the supervision of schools shall be placed upon the program; but, in assigning essays, the committee will not be limited to members of the department.

5. *Election of officers.*—The election of all officers shall be by ballot and shall occur at the close of the morning session of the second day of the annual meeting, at which time the report of the nominating committee shall be presented.

ARTICLE IV—MEETINGS

The place of meeting shall be determined by the voting members of the department on the morning session of the second day of the annual meeting, and two-thirds of the members present shall be necessary for a decision. Should the department fail to reach a decision before the adjournment of that session, the executive committee shall determine the place of meeting for the next ensuing year.

The executive committee shall have power to call special meetings of the department.

This constitution may be altered or amended at the regular meeting by the unanimous vote of the members present, or by a two-thirds vote of the members present, provided that the alteration or amendment has been substantially proposed in writing at the previous annual meeting.

AARON GOVE,
R. G. BOONE,
W. H. MAXWELL,
Committee.

After the reading of the report, President Glenn stated that the report would be referred to the directors of the National Educational Association.

Superintendent Gove appealed from the decision of the chair, insisting that, if the report was to be of any value to the department, it should be acted on immediately; to refer it to the directors of the National Educational Association would be to prolong its consideration one year. Superintendent E. H. Mark, of Louisville, Ky., desired the report examined by a proper committee before voting upon it. Superintendent Gove's appeal from the decision of the chair was then put to the department. The chair was not sustained. A motion was made and seconded that the committee's report be made the special order for Wednesday morning at 9 o'clock; the motion prevailed.

The meeting then adjourned until 2 o'clock P. M.

AFTERNOON SESSION

The afternoon session opened promptly at 2 o'clock, President G. R. Glenn in the chair. After several announcements of a miscellaneous nature, the program of the afternoon was taken up.

Dr. D. L. Kiehle, professor of pedagogy in the University of Minnesota, Minneapolis, Minn., addressed the department on the subject, "The Practical Application of All Learning to Better Living." Professor George E. Vincent, of the University of Chicago, and Superintendent N. C. Schaeffer, of Pennsylvania, led the discussion of Dr. Kiehle's paper.

Superintendent Henry P. Emerson, of Buffalo, N. Y., was introduced by the chair, and read a paper on "Influences That Make for Good Citizenship." The discussion was led by William E. Hatch, superintendent of schools, New Bedford, Mass., and H. O. R. Siefert, superintendent of schools, Milwaukee, Wis. Mr. John MacDonald, editor of the *Western School Journal*, Topeka, Kan.; Mrs. V. C. Meredith, of St. Anthony, Minn.; and Superintendent F. Treudley, of Youngstown, O., also participated in the discussion.

After several miscellaneous announcements, the meeting adjourned to 8:15 P. M.

EVENING SESSION

The evening program consisted of an address delivered by Dr. Frank Gunsaulus, president of Armour Institute, Chicago, Ill., on "Technical Education and its Effects on General Education."

SECOND DAY

MORNING SESSION.—FEBRUARY 26

President Glenn called the meeting to order at 9 o'clock, as per resolution of the preceding day, which also provided that the consideration of the report of the Committee on Constitution and By-Laws should be taken up at that hour. In response to a request from the members of the department, Superintendent Aaron Gove, of Denver, read the proposed constitution and by-laws. Superintendent C. G. Pearse, of Omaha, moved that the constitution and by-laws be read section by section. Carried.

On motion of Superintendent Joseph Carter, of Champaign, Ill., Art. I of the proposed constitution was unanimously adopted.

After a somewhat extended discussion of Article II, Superintendent Charles R. Skinner, of New York, moved that the proposed constitution be printed in the program for next year, and that the president be directed to prepare a place in his program for discussion of said proposition. This motion was unanimously carried.

The first subject of the session was "The Ideal Normal School." The paper was read by Dr. William H. Payne, professor of the science and art of teaching, University of Michigan, Ann Arbor, Mich. The discussion was led by Frank L. Jones, state superintendent of public instruction, Indianapolis, Ind., who was followed by R. G. Boone, superintendent of schools, Cincinnati, O. The general discussion was participated in by Superintendent C. F. Carroll, of Worcester, Mass.; Superintendent J. M. Greenwood, of Kansas City, Mo.; and Miss M. Elizabeth Farson, district superintendent of schools, Chicago, Ill.

Dr. W. T. Harris, United States Commissioner of Education, Washington, D. C., was then introduced by President Glenn. The department paid Dr. Harris a tribute of respect by rising when his name was called by the president. The subject of his address was "The Danger of Using Biological Analogies in Reasoning on Educational Subjects." The paper was discussed by Dr. G. Stanley Hall, of Clark University. The discussion was closed by Dr. Harris.

The president then announced the following Committee on Nominations for the ensuing year:

Superintendent E. H. Mark, Louisville.
Superintendent H. M. Maxson, New Jersey.
Superintendent Irwen Leviston, St. Paul.
Superintendent Henry P. Emerson, Buffalo.
Superintendent H. O. R. Siefert, Milwaukee.

The department then adjourned.

AFTERNOON SESSION

The afternoon session was devoted to round-table meetings, as follows:

A. ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

The meeting was called to order at 2 o'clock by the leader, Frank L. Jones, state superintendent of public instruction, Indianapolis, Ind.

First topic: "Instruction in the Elements of Agriculture in Rural Communities." The discussion was led by L. D. Harvey, state superintendent of public instruction, Madison, Wis., who was followed by Miss Virginia C. Meredith, of the School of Agriculture, St. Anthony Park, Minn. The general discussion of the topic was participated in by Superintendent Schaeffer, of Pennsylvania; Superintendent Barrett, of Iowa; Superintendent Carrington, of Missouri; Superintendent Olsen, of Minnesota; and Superintendent Roberts, of Peoria, Ill.

Second topic: "The Financial Phase of the Consolidation of Rural Schools." The discussion was led by Charles A. Van Matre, county superintendent of schools, Delaware county, Ind. Superintendent Schaeffer, of Pennsylvania; Superintendent Bayliss, of Illinois; Superintendent Bonebrake, of Ohio; Superintendent Fall, of Michigan; Superintendent B. E. York, of Kingsville, O.; Superintendent Collins, of South Dakota; Superintendent Bright, of Cook county, Ill.; and County Superintendent W. G. Hartranft, of Seattle, Wash., participated in the general discussion.

A short business meeting followed the discussions, at which the following officers were elected:

President— Mrs. Helen L. Grenfell, state superintendent of public instruction of Colorado.
Secretary— R. C. Barrett, state superintendent of public instruction of Iowa.

The round table then adjourned.

B. ROUND TABLE OF CITY SUPERINTENDENTS

Leader, James M. Greenwood, superintendent of schools, Kansas City, Mo. Subject: "Minor Problems."

Topic 1—Synopsis: (*a*) Selection of teachers. (*b*) Elimination of teachers who are intellectually incompetent. (*c*) Elimination of teachers who are not morally prepared. (*d*) Stimulation of teachers to follow right ideals.

I. C. McNeill, president State Normal School, Superior, Wis.

Topic 2—Synopsis: (*a*) The crack of the college professor's whip. (*b*) The nervous woman writer's tirade on the "crowded curriculum." (*c*) The conclusions of the notoriety-seeking schoolroom experimenter. (*d*) The demands of the old-school men that all be eliminated except the "three R's."

W. A. Hester, superintendent of schools, Evansville, Ind.

Topic 3—Synopsis: (*a*) How to meet the people. (*b*) Grade meetings. (*c*) Pay-rolls and financial statements. (*d*) Use of the teachers' association.

Louis P. Nash, superintendent of schools, Holyoke, Mass.

C. ROUND TABLE OF NORMAL SCHOOLS AND TRAINING TEACHERS

Conference I, Normal Schools.—Leader, Livingston C. Lord, president Eastern Illinois Normal School, Charleston, Ill.

Topic 1—"What Aspects of Psychology and Child Study Are Suitable Subjects for Instruction in Normal Schools?" The discussion of this topic was led by President Albert Salisbury, State Normal School, Whitewater, Wis.; President Livingston C. Lord, Eastern Illinois Normal School, Charleston, Ill.; President Homer H. Seerley, State Normal School, Cedar Falls, Ia.; Professor Daniel Putnam, State Normal College, Ypsilanti, Mich.; Principal James M. Green, State Normal School, Trenton, N. J.; Professor John A. H. Kent, Northern Illinois Normal School, De Kalb, Ill.

Topic 2—"Shall Instruction in Psychology and Child Study Be Oral, or Shall a Text-Book Be Used?" The discussion of this topic was participated in by Professor Grant Karr, superintendent of practice, State Normal School, Oswego, N. Y., and Thomas H. Gentle, director of the training school, State Normal School, Platteville, Wis.

Conference II, Training Teachers.—Leader, James E. Russell, dean of Teachers College, Columbia University, New York city.

Topic—"Criticism—What Shall it Be?" The leader, Dean Russell, introduced the discussion of this topic, and was followed by President J. N. Wilkinson, State Normal School, Emporia, Kan.; Professor Guy E. Maxwell, State Normal School, Winona, Minn.;

and Miss Sarah J. Walter, State Normal School, Willimantic, Conn. A general discussion followed by Principal Theodore B. Noss, State Normal School, California, Pa.; President Z. X. Snyder, State Normal School, Greeley, Colo.; Professor Edwin C. Page, Northern Illinois Normal School, De Kalb, Ill.; Professor Frank M. McMurry, Teachers College, Columbia University, New York; Professor John H. Glotfelter, State Normal School, Emporia, Kan.; President Livingston C. Lord, Eastern Illinois Normal School, Charleston, Ill.; and Professor N. A. Harvey, Chicago City Normal School.

EVENING SESSION

The program of the evening consisted of an address on "The Educational System of Porto Rico," by Dr. M. G. Brumbaugh, commissioner of education for Porto Rico.

THIRD DAY

MORNING SESSION.—THURSDAY, FEBRUARY 27

The department was called to order by President Glenn at 9:30 o'clock.

After making a number of miscellaneous announcements, the president announced the following Committee on Resolutions:

W. W. Stetson, Maine.
G. W. A. Luckey, Nebraska.
W. D. Parker, Wisconsin.
J. M. Greenwood, Missouri
J. S. McClung, Colorado.

President Glenn expressed the regret of the department because of the absence of Colonel Francis W. Parker, occasioned by impaired health, and stated that he thought the department was very fortunate in having present so excellent a substitute for Colonel Parker as Dr. Arnold Tompkins, of the Chicago Normal School, who would address the department on "Altruism as a Law of Education."

The report of the Committee on Nomination of officers for the ensuing year was then called for. The report of the committee was made thru its chairman, E. H. Mark, of Louisville, Ky., and the following officers were recommended for election:

President—Charles M. Jordan, superintendent of schools, Minneapolis, Minn.
Vice-President—Superintendent Clarence F. Carroll, Worcester, Mass.
Second Vice-President—Superintendent Warren Easton, of New Orleans.
Secretary—J. N. Wilkinson, president of the State Normal School, Emporia, Kan.

The report was unanimously adopted.

Dr. H. R. Sanford, of New York, moved that the directors of the National Educational Association be most earnestly requested to provide an official stenographer for the next session of this department. After voting down several proposed amendments, the original motion was unanimously carried.

The selection for the place of the next meeting of the department was taken up, and nominations were presented from New Orleans and Helena, Mont. The claims of Helena for the next meeting of the department were presented by State Superintendent W. W. Welch. Superintendent Warren Easton, of New Orleans, La., presented an invitation from the educational institutions and other organizations of his city. New Orleans was selected by the unanimous vote of the department.

Dr. G. Stanley Hall, president of Clark University, Worcester, Mass., was introduced by the chairman and read a paper on "The High School as the People's College *versus* Fitting Schools." The discussion was opened by Irwen Leviston, superintendent of schools, St. Paul, Minn. The general discussion was participated in by Commissioner Harris and closed by Dr. Hall.

The Committee on Resolutions then offered the following report, which, upon motion, was unanimously adopted:

Resolved, That it is a sense of this department that the subjects discussed should bear directly upon supervision in all of its phases; and that it welcomes to its meetings all who are interested in the investigation of its problems.

That a committee of nine be appointed to formulate, upon a sound educational basis, contemporary educational doctrine; submit statements covering contemporary educational experience; and indicate the tendencies of contemporary educational methods.

That all speakers discussing a paper shall speak without manuscript.

That the committee on program should make more ample provision for "round-table conferences."

That women should be represented on the general program of this department.

That the thanks of this department are tendered to the president for the rare intelligence manifested in the preparation of the program and the courtly dignity with which he has presided; to the secretary and other officers for numberless helpful and considerate courtesies received at their hands; and to the several speakers for the superior quality of the papers presented.

W. W. STETSON,
J. M. GREENWOOD,
G. W. A. LUCKEY,
J. S. MCCLUNG,
Committee.

Superintendent John Richeson, East St. Louis, Ill., moved the adoption of the following resolution, which was seconded by Superintendent Arthur Powell, Steubenville, O.:

Resolved, That, in order to secure facts and opinions bearing upon school administration, the president of this department shall annually appoint a committee of three to serve one year, whose duty shall be to receive questions which can be briefly answered, and have them printed in the form of a ballot to be distributed at all section meetings in the afternoon of the second day of the annual meeting, and to report the results during the forenoon session of the third day.

Amended, so that the members shall serve for three years, one being appointed each year after the first year. The amendment was accepted by the mover and seconder.

The resolution, as amended, was referred to the Board of Directors of the National Educational Association.

Miss Mary McCowen, supervising principal, Chicago Day Schools for the Deaf, extended an invitation to the members of the department to attend a series of meetings exemplifying the work of the Chicago schools for the deaf. After several miscellaneous announcements, the department adjourned to meet at 2 P. M.

AFTERNOON SESSION

The department convened at 2 o'clock, President Glenn in the chair. After a number of announcements, the chair introduced Superintendent Thomas M. Balliet, of Springfield, Mass., who read a paper on "College Graduates in the Elementary Schools."

The general discussion of Superintendent Balliet's paper was participated in by the following: Superintendent Eugene Bouton, of Pittsfield, Mass.; Superintendent A. K. Whitcomb, of Lowell, Mass.; Superintendent William J. M. Cox, of Moline, Ill.; Superintendent W. F. Slaton, of Atlanta, Ga.; State Superintendent Delos Fall, of Michigan; Dr. H. R. Sanford, of New York; Principal A. S Downing, of New York; Professor E. O. Sisson, of Bradley Institute, Illinois; Dr. E. E. White, of Columbus, O.; and John MacDonald, of Topeka, Kan.

Before declaring the meeting of the Department of Superintendence closed, President Glenn thanked those who were on the program for the careful way in which all addresses were prepared; the secretary and other officers, for their hearty co-operation in making the meeting a success; Superintendents Cooley and Lane, for so kindly looking after the details with reference to the place of meeting, hotel accommodations, etc.; and the members of the department, for their patience and willing co-operation during all of the sessions of the meeting. President Glenn then declared the session of the Department of Superintendence for 1902 closed.

Subsequent to the close of the meeting President Glenn appointed as the Committee of Nine provided for in the report of the Committee on Resolutions the following:

Hon. Frank A. Hill, secretary of the state board of education, Boston, Mass.
Superintendent L. H. Jones, Cleveland, O.
Superintendent C. B. Gilbert, Rochester, N. Y.
Superintendent C. H. Keyes, Hartford, Conn.
Professor George H. Locke, University of Chicago, Chicago, Ill.
Professor D. L. Kiehle, University of Minnesota, Minneapolis, Minn.
Superintendent C. N. Kendall, Indianapolis, Ind.
Superintendent J. H. Van Sickle, Baltimore, Ind.
Professor Elmer E. Brown, University of California, Berkeley, Cal.

JOHN DIETRICH, *Secretary.*

PAPERS AND DISCUSSIONS

OBSTACLES TO EDUCATIONAL PROGRESS

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In the following paper I limit myself to discussing obstacles to progress in three phases of educational activity; and in the time allotted to me I shall be able to treat in some detail only one of these three. The phases referred to are the making of school programs or "courses of study," the organization and administration of school systems, and the training of teachers for elementary and secondary schools; and of these I can treat only the first in some detail.

First, the obstacles to improvement in school programs or courses of study. The recent history of attempted reforms in school programs is quickly told. About twenty years ago the elementary-school program, with its narrow content and overwhelming emphasis on the school arts — reading, writing, arithmetic, and English grammar — was seen to be inadequate and formal. It provided some acquaintance with the school arts themselves, but afforded little real education. It prepared for an elementary education, but did not furnish it.

Accordingly, rather more than ten years ago we began to increase the scope of elementary-school programs. We sought to improve them by "enrichment." To the school arts, the formal studies, we added "thought studies"— literature, history, nature study, and an improved geography. To the narrow field of the traditional arithmetic we added elementary algebra and geometry; we laid more stress on the drawing, music, and physical training already represented in the schools' occupations; and we introduced manual training, and occasionally a foreign language. But the result was far from satisfactory. We had become convinced that enrichment was necessary, and had acted on our conviction. But the enrichment had involved us in new difficulties that proved to be formidable obstacles to progress. Our programs were congested, especially in those portions of the new programs most affected by enrichment — the earliest and the latest pre-high-school grades. The middle ground was and remains, justly I think, tho perhaps not always intentionally, the territory where the school arts are supreme.

Then it seemed that the elimination of "nonessentials" from the old programs would solve our difficulties. Such elimination, it was asserted, must precede and accompany enrichment — which was true; and it was also announced, with something of a flourish and a good deal of insistence, that "correlation" would accomplish the rest. Correlation was interpreted to mean such a grouping of the subject-matter that each study could and should be so pursued as to cover, incidentally, adequate instruction in others. Examples of such grouping would be history and geography, history and literature, reading and "nature study," nature study and arithmetic, English grammar and foreign language, elementary algebra and geometry and arithmetic, manual training and drawing. This solution of our program difficulties also insisted on a subordination of the formal studies to the thought studies. The school arts were no longer to be pursued solely as ends in themselves, but primarily as means to ends — as the instruments by which education is deepened and ultimately extended, but not as embodying an education themselves.

So promising and important did the solution of our program difficulties by means of correlation seem that, when this association, in 1893, appointed a committee on elementary-school studies, it was understood that one of the committee's most important duties should be to set forth, clearly and in detail, to what extent the problem of our program difficulties could be solved by correlation. The Subcommittee on Correlation of the Committee of Fifteen did not solve this problem, however, nor did they attempt it — altho they did something of as great or greater importance, as I shall point out later on; and to this day we are without the guidance that a thorogoing study of the interrelations of the elementary-school studies would afford. I mean such a study as would show to what extent parts of any one of them are naturally, necessarily, and adequately covered in the satisfactory pursuit of another or others. This important study is still awaiting the leisure and inclination of broad-minded students willing and able to devote a long period of time to it.

By this time we had attempted "enrichment," "elimination," and "correlation;" this had effected a more or less thorogoing revision of the program of elementary studies from beginning to end; and the result was *chaos*. There is no better term to describe the infinite variety, complexity, and instability that resulted from the successive tinkerings to which the elementary-school programs had been subjected. And chaotic they remain. But it is no longer a discouraging confusion. Before this stage had been reached, we had gradually come to see that what we needed was guiding principles. Without them, it was clear that we should only make confusion worse by further changes.

Out of this demand for guiding principles arose the Committee of Fifteen on Elementary-School Studies, the duties of which, it soon appeared, must transcend even the principles that underlie program-making. To make our educational endeavor effective, good teaching and wise organization and administration are needed, as well as good programs of study based on sound educational doctrine. Hence, the Committee of Fifteen divided its work into three sections, covering respectively educational doctrine, the training of teachers, and the organization and administration of school systems.

Before the elementary-school programs had been transformed to any considerable extent, and while they were still substantially what they had been since the beginning of the last century, strong dissatisfaction had been felt with the narrow training furnished by our secondary schools. Altho designed to meet the needs of all who could prolong their school education beyond the elementary-school stage, our secondary-school programs were determined chiefly by the small fraction of this number who could go beyond the secondary school to the college. Until within the last ten years, preparation for a college course leading to the bachelor of arts degree was everywhere either strictly limited to little else than a drill in the elements of Latin, Greek, and mathematics, or such modifications of these requirements as made it more difficult to prepare for college with the alternatives than with the traditional requirements; and, as just stated, these subjects occupied the lion's share of time and attention in secondary education nearly everywhere. The narrow and formal character of such a secondary education was gradually perceived to be, like the elementary education that preceded it, chiefly preparation for education, not education itself. The elementary school deferred the pupil's real education to the secondary school; the secondary school deferred it, once more, to the college.

Consequently we began to transform the secondary-school program as well as the elementary-school program — by enrichment. All this was gradual, but none the less real. As it proceeded, it became evident that no pupil could do serious work in the modern subjects and at the same time continue his classics. Twenty-five years ago we already had a bifurcation of the program into classical and non-classical divisions or "courses of study," dating from 1821, when the Boston "English High School" was established for those boys who were not going to college; and this bifurcation gradually developed into a division of the program into several parallel groups or "courses of study," each group or "course" consisting of a combination of studies comprising both, or one, or neither of the classical languages. To obtain the diploma of the school the pupil must select his group or "course of study," and adhere to it thruout the usual four years of secondary work. The prestige of the traditional classical studies was, however, so great that the non-classical divisions were for a time inferior to the others, and on this account they were avoided by the socially and intellectually ambitious pupils. The inferiority of non-classical studies has rapidly diminished, however, because of a more just appreciation of the intrinsic value of those studies, and a great improvement in the method of teaching them, and particularly because of a growing recognition of them by the colleges for college-admission purposes.

We had now transformed our secondary-school program by "enrichment" and by a multiplication of "courses of study." And these changes had led gradually and naturally to the elective system. The result was, however, far from satisfactory, (1) because the courses consisting of the modern studies were in dignity and seriousness of pursuit too often inferior to the classical course, and (2) because these courses could not be brought up to the standard of excellence of the classical course until the conventional estimate of the efficiency of a school by the community should be based on its general excellence, and not chiefly on its success in preparing pupils for college thru the classical course. That is to say, our program changes had grown out of the demand for a good secondary education for every pupil, whether he went to college or not. A natural corollary to this demand was that just as good work should be done in non-classical as in classical courses of study. But this demand had not been satisfied.

Out of this demand arose the report of the Committee of Ten. That report was to tell us how to combine a good modern with a good classical education; to tell us what a good non-classical secondary education is; and finally to promote uniformity among college-admission requirements thruout the country. And this it attempted to do. The attempt was made to give expression to a body of educational authority on the scope of each of the principal "studies" that had come to be generally recognized as appropriate to secondary education; on the time that should be devoted to each of them; and on the best methods of teaching them — all this whether a given study was to be used for college-admission purposes or not. The report was a magnificent document. For the first time in the history of American education the attempt was made to collect, on a national scale, and to give an organized expression to eminent professional authority on an educational question. The influence of the report was decided, immediate, and far-reaching. Its good effect on secondary-school programs was felt everywhere, but it probably benefited the smaller high schools of the country most by suggesting the desirability of limiting the scope of their work to what could be adequately accomplished, and by emphasizing the important principles of continuity and adequate intensiveness in the pursuit of all studies undertaken.

The Committee of Ten did not, however, define what a good modern secondary education is, except as that definition was implied in the programs recommended by them. The report was lacking in an illuminating, well-defended educational doctrine; it was rich in educational authority. It did, however, state two principles of procedure so clearly and emphatically that they could not be missed or misunderstood, namely: (1) that most of the studies theretofore regarded as secondary-school studies should be begun by pupils before the secondary-school age was reached; and (2) that a study should receive precisely the same treatment for pupils who are not going to college as for those who are. These two principles were intended to promote the solution of two important difficulties in program-making that the rapid changes in both elementary- and secondary-school programs had developed, namely, the articulation of elementary to secondary education, and the articulation of the secondary school to the college, respectively.

The enunciation of the first of these principles did much to promote desirable program changes in pre-high-school grades, altho it found rather scant recognition in the report of the Committee of Fifteen, which, as everybody knows, was prepared after the report of the Committee of Ten. The second principle has also found general acceptance thruout the country. It has promoted the widespread consciousness of their function as independent educational institutions which the secondary schools now possess and maintain; it has been emphasized in another important report, the report of the Committee on College-Entrance Requirements; and finally its influence has been felt by the colleges themselves, which now manifest a steadily growing inclination to accept the proposition that any good secondary education, either with or without the classics, is a good preparation for college.

This last point—the present attitude of the colleges—received special treatment in the latest of the three reports on school studies emanating from the National Educational Association, namely, the report of the Committee on College-Entrance Requirements. The demand for guidance in our educational endeavor had now reached the point at which it was felt that a general improvement in secondary education would result if we could establish national norms or units of work for each study, each of which, no matter what the study, might be accepted by any college toward satisfying its admission requirements. The attempt to formulate these norms was made by the Committee on College-Entrance Requirements. It is too soon as yet to estimate the specific influence of this report on school and college work; but it was another comprehensive and decidedly creditable attempt to bring order out of chaos; this time especially by the articulation of secondary to collegiate education. Incidentally also, in no small degree, it has tended to overthrow shams and superficial work by setting up a reasonable standard of achievement by units of work in all secondary schools thruout the country.

Now, it is clear that all this while, amid the chaos of experimentation and imitation in school programs, what we have been seeking is *guidance.* Out of this demand for guidance have arisen the three reports already referred to. Out of the same demand has arisen in this country, during the last ten years, a volume of educational literature in periodicals, books, and special reports by individuals and associations, the like of which for quality and quantity we have never seen before. The question which we have to ask ourselves is this: Why is it that after twenty or thirty years of unparalleled educational interest and activity there is still so much vagueness about our aims, so much indecision about the adaptation of means to ends (programs and methods), and so much uncertainty about our results, that even today we still seem, as of old, "always bound nowhere under full sail"? I think the answer is found in a single sentence: *We have not yet organized our educational doctrine, we have only formulated it piecemeal; and we have not organized our educational experience — we have not gathered the fruits of experience as we went along.*

Each of the documents to which reference has been made, for example, is an isolated piece of work, without any reference to, certainly without any correlation with, the others. Each of them was formulated as if there were no other educational literature deserving recognition for work done in its own field, or to which its own peculiar subject-matter sustained important relations. A similar statement applies, almost to the same extent, to the writers of the great body of the educational literature referred to. Each writer seems to regard himself as having received a special revelation of the educational gospel, vouchsafed to him alone; so completely do most of them ignore their fellow-prophets, who of course reciprocate by similar apparent indifference.

I have already reminded you that the significance of the work of the Subcommittee on Correlation of the Committee of Fifteen lies in the fact that they — or rather he — declined to bring order out of chaos by a more or less mechanical readjustment of the conventionally accepted studies of the elementary-school program. Dr. Harris set himself the task of setting forth an educational doctrine — the task of formulating the guiding principles that underlie educational endeavor. He therefore pushed the study of correlation beyond a mere inquiry into the relief of congested programs by means of a readjustment of the various branches of study to each other, to a more fundamental inquiry, namely: What is the educational significance of each study? What contribution ought each study to make to the education of a modern child? What is the educational value of each study in *correlating the individual to the civilization of his time?*

That this was the problem of problems was clear to most persons as soon as it had been pointed out, and after the disappointment over what the report did not do had subsided. If further proof is needed, it is furnished by the fact that today the progress we are making and the obstacles we encounter in planning our elementary-school programs all center in the problems of educational aims and educational values. When we, teachers and laymen, see clearly what an equipment for modern life means; how much of this equipment it is feasible and desirable to attempt in the elementary school; and what each branch of study contributes in knowledge and power to this equipment; we shall possess the key to the solution of our program difficulties, whether they pertain to the distribution and interrelation of studies and time allotment, or to adaptation to local needs, equipment, or teaching force.

Dr. Harris' report was and is, therefore, a great report. But it has a great weakness: it is the work of but one man — a strong man, but nevertheless only one. The report could, therefore, possess only the strength of that one man. It came with the accumulated momentum of years of educational leadership on the part of its author. Nevertheless, it was not and could not be generally accepted as a contemporary solution of the important problem with which it deals. It had paid too little heed to the earlier and contemporary discussion by others of the same problem. It did not adequately represent collective professional insight.

The earlier report — that of the Committee of Ten — and the later report — that of the Committee on College-Entrance Requirements — did not possess this particular weakness. The report of the Committee of Ten presented an overwhelming array of educational authority, and had in consequence, as already remarked, an important and widespread influence in promoting the improvement of secondary-school programs. The fundamental weakness of that report consists in the absence of a thorogoing formulation and exposition of contemporary educational doctrine, to which all good secondary-school programs must conform. Had the report set forth such an educational theory, its strength would have been seen to lie chiefly in Table I, and not in the subsequent tables, and least of all in the specimen programs of Table IV. Yet so strong a hold had the habit of program-making acquired that those programs were seized upon as the real fruit of the committee's labors. Table I not only embodied the important articulation of secondary to elementary and college education, to which reference has been made above, but also exhibited the subjects that ninety well-selected professional teachers regarded as essential to a satisfactory modern school education. Table I therefore embodied the real results of the committee's labors, and not Table IV. No one saw more clearly than the chairman of the committee that the programs of Table IV could not be a permanent solution of secondary-school program difficulties. President Eliot said repeatedly that he regarded them merely as "scaffolding," as temporary structures; that they must give way to other and better ones as soon as further study should make clear just what selections and combinations from Table I schools could offer, or local or individual needs should demand ; and this view is clearly indicated in the remarks of the committee on Tables II and III, pp. 37–44.

Had the Committee on Correlation of Studies "correlated" its report with the work already done by the Committee of Ten, the result would have been a much more important and serviceable document than either produced alone. Educational theory based on experience and reflection would have criticised and illuminated educational authority based chiefly on experience ; and out of the two might have been produced a body of educational principles the overwhelming weight of which in directing educational practice would no doubt be conspicuous everywhere. That is to say, such a body of educational principles could not fail to *unify* our educational endeavor by a general adherence to common aims clearly understood, while it would not attempt to make it uniform in respect to either means or methods. In the absence of such generally acceptable unifying educational principles, our experiments in program-making have continued to be largely imitative instead of intelligent, and hence our programs are unstable to the last degree.

In the report of the Committee on College-Entrance Requirements we have again an important document that absolutely ignores the work of its predecessors, and once more collects contemporary educational opinion *de novo*. The Committee on College-Entrance Requirements had the advantage, however, of formulating its resolutions in the light of the opinion and experience that had followed the publication of the two earlier reports, altho there was no explicit attempt to correlate the work of the committee with that of either the Committee of Ten or the Committee of Fifteen. Its most important contributions to guiding principles are its approval of electives in secondary-school programs, its recommendation of a unified six-years' high-school course, its emphatic insistence that any study well taught during a sufficiently long period should be accepted toward satisfying college-admission requirements, and its attempt to define national norms or units of work in the several studies of the secondary-school programs.

As already stated, I think the influence of the report of the Committee on College Entrance Requirements, like that of its predecessors, has been considerable. Besides the good it has accomplished, it has however, like those other reports, also complicated the educational situation by not explicitly taking into account what the earlier reports had already done ; and in failing to incorporate as explicitly in its resolutions and expositions the cumulative influence of the best educational literature that had developed since the agitation which led to the other two reports commenced. Like the others, the report of the Committee on College-Entrance Requirements is therefore an isolated document. Like them it must fail to exert, as it might, that unifying influence for guidance which we need so much, and which is still a consummation devoutly to be wished.

Incidentally these three reports have failed in another way to become the unifying influence which they might and should have become. Each of them not only ignored the other two, but each of them set itself the impossible task of solving program difficulties by studying only a limited portion of the pupil's educational career. Once at work, however, each committee found it impossible to limit its field so narrowly. The Committee on Correlation necessarily dealt, incidentally, with secondary-school problems, and the other two committees similarly found it necessary to consider, to some extent at least, problems of elementary education. Taking the three reports together, there is probably no single defect that has been so effective an obstacle to their use for guidance as this want of unification of their subject-matter in harmony with the interdependence of the problems with which they deal. We have had a body of educational doctrine that covered elementary education, and one that covered secondary education, as if the two were distinct and independent. We need an educational doctrine that covers the entire school period, and so may serve as a guide to practice at each stage of the pupil's school career.

We are, therefore, still seeking definite guidance. The want of it has led and still leads to economic and educational waste; and hence to uneasiness and vacillation within the teaching profession and dissatisfaction in the community. How can we expect the great body of teachers to accept the program changes which we recommend in the only spirit that will render them valuable — the spirit of interested, or at least intelligent, co-operation — as long as we have no such definite guidance? How can we expect the community to be impressed with the wisdom of changes that run counter to all tradition, to be interested in them, and to display the patience that must be exercised before such changes can commend themselves alike to all concerned? And how can we expect the schools to be free from persistent, usually well-meant, but pernicious meddling with the details of school work by school committees, parents, newspapers, and other lay influences?

The remedy for such obstacles is not far to seek, but experience thus far seems to show that it is difficult to secure. It is this: we need a new formulation of contemporary educational doctrine, that will serve to clarify our own conception of what a modern education means, and therefore serve as a guide to intelligent, co-operative, and prolonged experimentation on a large scale. Such a formulation of educational doctrine would be based on our present knowledge of social needs; and it would be formulated in the light of the best educational literature that the last dozen years or so have brought forth, to say nothing of the educational classics of earlier generations. Such a body of educational doctrine would be more generally and more seriously studied than any formulation of educational doctrine has ever been studied; and it could, therefore, be expected to furnish an insight and a purpose into the now too generally imitative and chaotic experiments in program-making with which we are familiar. Educational experiments are desirable and inevitable; my plea is for a more rational experimentation than we have yet had; and, as I shall point out in a moment, for an experimentation that enables us to gather the fruits of experience as we go along.

With an educational doctrine thoroly assimilated and consciously adhered to — no matter whether it achieves universal acceptance in all its details or not — superintendents, principals, and teachers can face the community with a professional consciousness that must triumph over ignorant or meddlesome obstructions, repeatedly break down indifference, and occasionally promote enthusiastic co-operation, until it is clear just what can and cannot be achieved by it. By that time we would demand a fresh formulation of our educational doctrine; new experiments would follow, but not a repetition of former errors. In this way progress would be steady and sure, in spite of errors; not random, haphazard, and uncertain, as it must be now. It appears, therefore, that we need to repeat our formulation of educational doctrine at intervals — say once in ten years — often enough to embody in it the new insight that changing social needs, a careful study of the best educational literature, and our practical experiments afford.

But a satisfactory educational doctrine is not enough to promote educational progress. Doctrine must achieve success in application over a wide area to be really effective. Now, just as we have not organized and adequately assimilated a generally accepted educational doctrine, so we are without a body of recorded educational experience. Results actually achieved and collectively presented constitute a force that is capable of sweeping away superficial criticism and paralyzing skepticism on the one hand, or meddlesome interference and impatient clamoring for premature results on the other. Isolated successes have been advertised, to be sure; and failures, more or less obvious, have sometimes been frankly confessed, and sometimes unwisely suppressed. But in neither case have we had an orderly presentation of both successes and failures over a wide area. We have had plenty of experiments; indeed, as I have intimated, our whole educational activity for nearly a generation has consisted of experiments. But we have had little co-operation. Just as every educational theorizer has worked by himself without taking due account of the labors of his fellow-workers in the same field, so every superintendent has pursued his way apparently in blissful indifference to what his fellow-superintendents were doing, multiplying instances and varying conditions *ad libitum*. How is it possible to extract any confirmation of alleged results from such a heterogeneous procedure? And we never can get such confirmation until we abandon our absurd extreme of individualism in these experiments ***and work together*** for the attainment of the same ends. No physicist or biologist would ignore his fellow-workers in the way here condemned. When Roentgen announced his discovery, other physicists confirmed *his* discovery. The facts of embryology and their bearing on the theory of evolution were similarly confirmed by each biologist under the conditions which led to their discovery. The principles of science once established in this way, no one can doubt or belittle them. Each experimenter, then, sees clearly what conditions must be observed to secure certain results, and the application of principles proceeds intelligently, no matter how varied the circumstances under which the application is made. So must it be in education, if we are ever to escape from the quagmire of random and isolated experimenting in which each worker seeks to find the way out for himself, disregarding the landmarks and sign-posts that have already been set up by his predecessors. Briefly, then, we must organize our educational experience just as we must organize our educational doctrine, if we are to make real progress.

Let me give two or three illustrations of what I mean. Every school system having five thousand or more children, and many smaller ones, is and should be, among other things, an educational experiment station. Suppose that in twenty-five school systems of this country the attempt were made by the superintendents *acting together*, under ordinary conditions of teaching and equipment, to discover just what the accomplishment in the three R's is with a given time allotment, agreement having previously been reached, for the sake of the experiment, as to the conditions under which the experiment was to be tried. Suppose the conditions to be something like this: five hundred or a thousand pupils in each city to begin the study of arithmetic in the first year; a similar number to begin it in the second year; and a third similar group to begin it in the third year of school. At the end of the sixth year of school compare the attainments of the three groups of pupils. Would not the conclusions reached by such experiments have a convincing value which no amount of assertion beginning "in my schools," or "so far as my experience goes," or "I believe," or "in my opinion," could possibly have?

Suppose, again, that in the same twenty-five school systems the study of algebra, geometry, foreign languages, and elementary natural science were undertaken in two pre-high-school grades, with substantially the same aims, equipment (books and apparatus), time allotment, and teaching force. That is to say, suppose that it were understood that these studies, if undertaken at all in pre-high-school grades, were to be undertaken seriously. Suppose, further, that this experiment were continued for not less than five years. If the twenty-five superintendents should then make a collective report on the results of the work, would not such a report have an overwhelming force in determining public opinion within and without the profession, making future progress less doubtful and future experiments more profitable than is now the case?

Or, again, suppose that our contemporary independent experiments with the elective system were correctly reported on and the results so far attained duly appraised by competent investigators. Would it not be possible to find twenty-five important schools that, for the sake of the educational interests at stake, would be willing to sink minor individual differences in the administration of the elective system, and consent to act together? Or, if we couldn't get twenty five, could we get ten schools to undertake this co-operative enterprise for at least five years?

I do not believe that such co-operation is impossible. Why should it be? Experiments similar to those suggested are everywhere in progress; co-operation in large enterprises of all kinds is possible. Why should it be impossible only in education? Under such circumstances we could then face the profession and the public with *facts*, instead of opinions. The enormous difference between the weight of these two very different things in educational affairs still remains to be experienced.

When we consider the obstacles to progress in the organization and administration of school systems, we find them similar to the obstacles already considered in the fields of educational theory and practice, altho not identical with them. We have two important documents embodying collective expression of opinion on wise and efficient organization and administration, but we lack any collective presentation of recorded experience. We have one important document on organization and administration in the report of the Committee of Fifteen, and another in the report of the Chicago school commission. What we need is a clear statement of the improvements effected in various cities thruout the country during the last six or eight years; of the old difficulties that remain unsolved, and of the new difficulties encountered in attempting to carry out the revised administrative policy. The collected experience of Toledo, St. Louis, Cleveland, Indianapolis, New Haven, New York, and the proposed plans for reorganization in Chicago, Boston, Detroit, and other cities, afford material for such a presentation of a wise administrative policy, and the beneficent results that flow from it, or to be expected from it, as we have not had and could not have until now. Shall we not take steps to procure it?

The chief obstacles in the way of better organization and administration of our city school systems are the failure of the public to recognize the educational expert as such, and the corresponding unwillingness to trust him when found. The chief reasons why this recognition of technical knowledge and skill in the field of education is too often difficult to secure, and the wisdom of following the professional leadership is not realized, are: (1) the unfortunate lack of a genuine professional knowledge and a well-considered administrative policy on the part of many superintendents, even when they have had much practical experience; and (2) the want of courage and initiative on the part of many well-equipped and otherwise efficient superintendents. Such men fail to enlighten their respective constituencies on what a wise organization and administration means, and also fail to insist, even to the point of self-sacrifice, that such an organization and administration shall prevail. In other words, the teaching profession cannot expect recognition for professional knowledge and skill until its members take pains to possess it, and unless they possess also the energy and the courage of their convictions. Lawyers, physicians, and engineers were not accorded professional standing, could not achieve the confidence of the public they wished to serve, until they could prove by their practice, based on adequate training, that they deserved it; and so it is in our profession. All teachers, but especially superintendents, must show their fitness to lead, not merely by an apparently successful routine practice of their profession, but by a professional career that is based on a professional consciousness born of adequate training — a training that lends significance to every phase of practice and furnishes a safeguard against the presumptuous or ignorant assumption of technical duties by either meddlesome and spoils-hunting or well-meaning but misguided laymen in educational affairs. With a professional consciousness born of a professional equipment, lay interference in organization and administration will not be tolerated. Courage to insist on what ought to be done will be as natural and easy for the superintendent and principal as for lawyers, physicians, and engineers to insist on the wisest measures in their several fields. And, so far as self-sacrifice is concerned, are we not justified in saying, at least to the younger superintendents: Do not court opposition; try to cultivate public opinion in behalf of wise measures; be patient and long-suffering, but in the end you can afford to lose your place, if it comes to that, *because you insist on what is right.* The man who loses his place because he insists courteously, intelligently, patiently — in a word, *wisely* — will not need to wait long for employment? We are fortunately not without illustrations of the truth of this proposition, and of the practical wisdom of the recommendation based on it.

I have time for only a few words on the obstacles to progress in the third division of the educational field mentioned in the beginning of this paper, namely, the training of teachers for elementary and secondary schools.

The greatest obstacles to real progress in the training of elementary teachers are want of *scholarship* on the part of both students and teachers in normal schools, and the want of insistence on good professional training by school officers and employers of teachers.

We have had at least two authoritative recent documents emanating from the National Educational Association which set forth the aims, equipment, and methods that should prevail in normal schools for the training of elementary-school teachers. And there seems to be substantial agreement on the advisability and feasibility of the practical realization of what these documents recommend. We have a normal-school doctrine that seems to be fairly acceptable, but have we a normal-school practice in harmony therewith, or an adequate normal-school practice anyway? It is not uncommon to hear the normal schools and their product disparaged. What ground, if any, is there for such disparagement? Has anybody collected the testimony of superintendents and other competent persons concerning the relative efficiency of teachers trained in our normal schools and of teachers not so trained? What agency, either by states or otherwise, has set itself the task of ascertaining the actual working efficiency of our normal schools? If we had a thorogoing report on that subject, say from a dozen normal schools chosen from the country at large — such a report could be made without mentioning in the report the name of a single school — what an incentive it would afford to efficiency! How clearly it might show just what the obstacles are that thwart or obstruct the progress of their work, or sometimes defeat it altogether! On the basis of such a report, public opinion within and without the teaching profession would soon demand the best professional training attainable, and unwavering recognition of it when obtained.

What I have just said about the failure to demand adequate scholarship of elementary-school teachers cannot be asserted to the same extent in the case of secondary-school teachers. But, much more than in the case of elementary-school teachers do we find the lack of a demand for adequate professional, i. e., technical, training in addition to scholarship. Nothing is a more obstructive influence in secondary education than the want of proper professional training of the teachers. Of course, they will not seek such training until it is demanded, not in a half-hearted and after-all-it-doesn't-matter-much sort of a way, but in an unmistakable, insistent fashion. If you as superintendents have no confidence in what you think we who are training secondary-school teachers are doing, take steps to find out what we are doing, tell us our shortcomings, and point out what you believe ought to be added to what we are now doing. As soon as your demand for the right kind of professional training for secondary-school teachers is strong, persistent, and widespread, such training will be forthcoming. At present a college student who has taken pains to add technical training for his profession to his academic attainments finds himself just as likely to be passed by in the competition for places as one who has not. Under such circumstances the best possible provision for technical training can reach only a comparatively small number of college graduates who become teachers.

I cannot close without expressing the hope that this association will ere long take steps to organize our contemporary educational doctrine and our practical experience in some such way as has been suggested in this paper. May I not commend to you the words of the Chinese delegate to the peace conference at The Hague! That conference, you remember, took place shortly after Admiral Dewey had destroyed the Spanish fleet at Manila. The Chinese delegate to the peace conference listened to the eloquence of his colleagues for some time, and then remarked: "Too much talkee, talkee; too little do-ee, do-ee."

DISCUSSION

WILLIAM K. FOWLER, state superintendent, Lincoln, Neb.— I have not recently delved into the reports of the Committee of Ten, of Fifteen, and of College-Entrance Requirements, tho I wish to claim the credit of reading them several years ago. Nor have I read any other reports or documents or publications preparatory to this discussion. I do not desire to be classed with those mentioned by Professor Hanus as working absolutely independent of all others, however, for I have conferred with school people and laymen on these and similar matters, and I desire to present for consideration and discussion topics that I hear mentioned daily as I go out among the people of my own state; out into the cities and villages and rural communities of the commonwealth.

Once upon a time a farmer was impressed with the argument that only by averaging might the best results be accomplished. He heard that one extreme in either direction was very generally condemned, and he was told that for the best results, practical and progressive, the two extremes must be used, thereby securing a fair average. With that idea fairly impressed upon his mind, he hitched to his plow, side by side, an ox from New England and a finely bred, high-stepping, 2:10 trotting horse from Kentucky.

The great heterogeneous mass of the people is thus driving the public schools. Is it any wonder that our "gee! whoa! haw! git ap!" is no more effective, or that our furrows are none the less crooked? Our ox takes the furrow and keeps it, in the rut, while our trotting horse prances about, making but little impression on the unbroken sod. Sometimes we find the combination illustrated in the contrast between the rural schools that have remained unchanged thru three generations and the finely supervised or overtrained city school system; sometimes we find the two existing in the same place under different administrations — at one time traveling the hard, stony, well-worn and well-known path of the past, and at another endeavoring to make new paths and new by-ways on virgin sod, on unbroken prairie, seeking out untried and untrod paths and pastures.

Some demand of us that we dispense with the services of our high-stepping, overstrung trotting horses, and return to the yoke — of oxen, of course. They charge that we teach less thoroly than formerly, that we attempt too many subjects, and give but a smattering of each. We *may* seem to be tending somewhat in that direction, but we are driven to it. The pressure is from without, not from within the schools. The medical men demand that a regular system of physical training be used; the Grand Army of the Republic wants military science and drill; the *Turnverein* asks for gymnastics; the clergymen insist that morality be inculcated by line and precept; the Woman's Christian Temperance Union has succeeded in introducing formal teaching of the effects of alcohol, tobacco, narcotics, and stimulants; the women's clubs beg for domestic science; the sewing guilds for needle-work; the trades for manual training; the business world for stenography and typewriting; the editors for current events; the artists for picture study; the musical world for music; and the farmer for the elements of agriculture.

One of the gravest problems presented to our rural school-teachers and their county superintendents is the desire of many school boards and patrons to introduce into the rural schools high-school subjects. School people generally understand that these subjects cannot be taught there without great detriment to the work and instruction of the little folks. I have found many rural districts where it is *demanded* of the teachers that they instruct classes in algebra, civics, and physical geography, in addition to thirty or more classes in reading, arithmetic, spelling, geography, etc.

The demands of our modern civilization are great. Two or three generations ago it was not necessary for the youth to study the sciences — there was but little known of them to study. Today the well-educated youth must be familiar with modern machinery, with common business practices, with affairs of state, and with the latest scientific discoveries. With the telegraph and cable connecting all the cities of the world, with the telephone soon to connect all its farmhouses, with the steamships and steam cars and electric cars connecting all its cities, great and small, with million-dollar bridges spanning all its great rivers, and with its vast commercial enterprises, there is no end or limit to the practical knowledge that may be gathered.

There is poor and indifferent work as well as excellent work done in the schoolrooms of Nebraska, and this is true in every state in the union, in every country of the world, and it always has been true. There is always good, bad, and indifferent work in every other walk and avocation of life, in every other profession and every trade, and with less excuse for such a condition; for in the other professions and in most of the trades there is more regular, systematic, and careful training for the work than we find for our important work of training the youth of the land. And low salaries accompany unskilled labor. In the 8,000 schoolrooms in Nebraska this year, and every year, we find nearly 2,500 teachers who have had no experience whatever, and not one-sixth of the number have had any special training for their work. Obstacles! Nebraska employs annually over 9,000 teachers, in less than 8,000 schoolrooms. Many teach only three months! They meet with obstacles. And so do the pupils — obstacles to progress. Our 9,000 teachers include only 2,000 male teachers, whereas eleven years ago the state employed 2,800 male teachers. The average school year in the state is six and three-fourths months, and the average salary is $38 a month, something like $255 a year. There are scores of principals in the state receiving $585, $630, or $675 a year, less than the labor of many unskilled workmen. The average life of the school-teacher in Nebraska, as a teacher, is less than four years. Yes, we have our obstacles; and yet we can boast of our very low percentage of illiteracy in Nebraska. How is it with you, neighbor?

Some of the obstacles in the way of educational progress have been placed there by ourselves, some by the public generally, and still others thru co-operation. I desire to enumerate a few briefly, leaving the removal of them to be discussed by others.

Within our ranks we have established and permit to exist the following obstacles to educational progress:

A lack of unification in our educational forces. This includes a lack of harmony between universities, colleges, normal schools, business colleges, etc., in many essential particulars.

A low professional interest among teachers. To increase the interest we must improve the teacher, and the public should demand a higher standard of requirements.

Too many preparatory schools for higher schools, at least in comparison with the number of preparatory schools for happy, useful lives. Perhaps the number of the latter can be increased without decreasing the former.

The attempt to create or manufacture instead of train and develop; to turn out money-making machines instead of well-developed, manly, and womanly characters. In this connection also we may include the scattering fire caused by too many aims.

Too many persons in the work who are without educational opinions, and too many others in the work who are educationally opinionated.

Too much emphasis placed on forms and methods.

Mixture of standards and transition of ideals — the yawning Scylla and Charybdis of the pedagog — generating much pressure and nervous strain. This strain is so tense that the tendency is that the teacher loses the best of himself, his poise, his courage, and his full joy of life. To hide his loss, he becomes a recluse, which militates decidedly against a unified ideal among teachers. This is in itself an impediment to progress. If, however humbly and truly, the teachers are the servants of the public, they must at length become a sort of composite Moses, to lead the public out of the educational wilderness into that glad Canaan which awaits.

The general public has kindly assisted us in rolling in the following obstacles and hedging them 'round about our public-school system :

Misunderstanding the nature of education, the purpose of education, and the results that should be expected; establishing false and pernicious ideals.

There is a widely different point of view between the public and the teaching world. Neither the general nor the teaching public, as a whole, has a clear idea of what it wants or what should be expected. A clearer comprehension of what education is, or should be, must precede any marked advancement in securing the same. There are too many aims in education on either side, and fusion here has simply aided and emphasized confusion.

The lack of unselfish feeling, partnership, and co-operation between parents and teachers is a great obstacle to educational progress, which in this case had better be expressed as the *child's* progress and well-being. With this should be included the oft-recurring conflict between parental and state authority as to what a child's minimum education should be, what he must study, and the governmental or disciplinary authority relatively of parent and teacher.

Another obstacle is the neglect of physical education that would develop bodily conditions, that would support a vigorous mentality.

Overcrowded courses of study, with scattering fire instead of concentration, prevents substantial progress.

Last, but not by any means least, among the obstacles to educational progress for which we are all responsible, whether within or without the ranks of the teaching profession, is the unprofessional standing of teachers and their low salaries. I feel that the one who accepts a low salary — an amount far below what his services really are worth — is equally guilty for evil results with the one who offers the same.

Now I am going to make a series of bald, perhaps gray, statements of obstacles to educational progress, the removal of which is chiefly in the hands of the public. We must ask them to remove them. Many of them are beyond our power and jurisdiction :

Decentralization. Outside the great cities the school officers outnumber the teachers five to two. The seven thousand schools of Nebraska are managed and controlled by twenty-two thousand school district officers. This is lack of concentration with a vengeance. There is too much divided responsibility. We, superintendents, are willing to assume more. There are too many small schools and smaller classes.

Irregular attendance is a great obstacle.

In many parts of the country there is a lack of sufficient funds properly to conduct the schools. Some states place a limit on the legal amount of school taxation and bonded indebtedness of school districts, and upon nothing else ; probably upon the theory that the people in their great interest in the welfare of their children may expend too much upon their education and general welfare, while there is no fear whatever that too large an amount will be expended upon the care of the streets and the improvement of roads, upon a sufficient amount of drinking water and plenty of gas! We ask for a higher appreciation by the public of the importance of school work, and a willingness to contribute more freely to the support of the legitimate work of the public schools.

The public demands specialization before fundamentals are mastered. They demand the teaching of too many subjects. The demand for one specialty is made by one profession, for another subject by another profession or a trade, and so on, and the public does not realize the sum total of our unhappiness in this respect. One of these demands is for short, abbreviated, hotbed business courses, and too many high schools are offering a course that gives little or no training, and affords in six months' time no more information than a young man might acquire in a bank or lumber yard in two weeks.

There is too strong a demand from without to get the children thru school in too brief a time; too much commercialism; too much love of the almighty dollar. A popular notion prevails that an education is an extraneous equipment which may be bartered for a livelihood.

The present social conditions and the demand for society or social life for mere school children interfere greatly with solid, substantial, progressive school work.

One of the greatest obstacles to educational progress, at least in certain portions of the country, is the great lack of professionally trained teachers, and the lack of facilities for training them.

There is a lack of strong men and able women in the ranks, caused by lack of appreciation, of adequate pay, of stable conditions. There must be better pay, and a surer, longer tenure of office to draw and retain *men* especially of ability and character.

The powers that be must cease to foist upon the schools their dependent and unqualified relatives. The great mass of the people, the great middle class, the practical, progressive people with a good, common-school education and common-sense ideas and ideals, must awake to the real needs of the schools and show less apathy to school work.

I believe that the addition of school gardens, gymnasiums, and manual-training schools would remove many obstacles to educational progress.

My own experience emphasizes the lack of efficient supervision for rural schools, a cure for which would be the centralization and consolidation under township organization. A county superintendent has written me: "Our rural schools have everything the city schools lack, and they lack everything the city schools have." Would that we could make a happy combination of the two!

I wish to indorse and second the request of Professor Hanus for a committee of the National Educational Association, or of this department, on the reformulation of educational doctrine, systematic experimentation, and unification of educational forces, with emphasis upon the last.

THE VALUE OF EXAMINATIONS AS DETERMINING A TEACHER'S FITNESS FOR WORK

EDWIN G. COOLEY, SUPERINTENDENT OF SCHOOLS, CHICAGO, ILL.

This is a day of examinations. Examinations as a means of selection of public servants are becoming more and more popular. The movement for the reform of the city, state, and national civil service by examinations seems irresistible. We have used them as a means of selecting teachers for many years, and the introduction of this topic as a subject of discussion at the superintendents' meeting seems rather startling, just when people are beginning to accept an examination as a panacea for all sorts of public ills. The subject, however, is a timely one, just because we seem likely to go too far in the advocacy of examinations.

If a man or woman is wanted to do a piece of work, the ideal way to select such a person is to have some disinterested third person, who is well acquainted with the nature of the work to be done, select, after careful observation and examination, the one best fitted to do it. This practice, however, in a large system would inevitably degenerate into a condition of things where the men who made this selection would know very little about the nature of the work to be done, and would care less. They would be, however, intensely interested in the persons who ask for the job; in other words, it would be likely to degenerate into a system of "pull," a sort of bargain and sale affair in which the various positions would be given to people on account of the *quid pro quo* they or their friends were able to offer. Sooner or later this interest in the person and indifference as to the way the work is done becomes evident to all and leads people to realize the necessity for introducing some machinery that will reduce the personal element involved. Written examinations have been the machinery most commonly employed. As Latham says, "an examination serves to make smoother the personal relations among people employed in a given system of work by shifting the duty of selection from individual shoulders and putting it on a relentless piece of mechanism."

The same principles are called into play when we introduce the mechanism of examinations that are called into play when any bit of machinery is employed to do the work formerly done bare-handed, so to speak. The man who undertakes to invent or make a machine that will do the work previously done by hand begins by analyzing the work to be done, and he selects machinery that will deal with certain essential and typical parts of the operation, and do this under typical circumstances. He sees the necessity of disregarding the exceptional case. He realizes that his machinery is bound to fail at some point or other; that it can deal only with the average situation. The man using the machine is compelled to pay attention only to the average sort of material with which he works. The machine cannot be adjusted to suit the various sorts of materials with which a hand-worker might do a good piece of work. The machine always spoils good material if it happens to be out of the ordinary. It is spoiled on account of the character of the machine, on account of its inability to adapt itself to exceptional material. The examination is subject to the same sort of limitations as other pieces of machinery. It can really test only a few qualities, the number depending on the character of it.

An examination may test one's accuracy, the fullness of one's memory, and one's power of concentration. As Latham says, in his classical book on *Examinations:*

> Behind these qualities lies something which a mental physiologist would call massiveness or robustness of brain, or which we may call energy of mind. Of this, so far as it is brought out in dealing with books and ideas, we can judge fairly from a written examination. We can see that knowledge has been got and know that brain work has been done to get it, and, in addition, note indications of strength or feebleness of will, and we can find out pretty well from a set of papers whether a man knows his own mind or not.

On the other hand, examinations do comparatively little to test the moral qualities. While they will test the intellectual power, and such moral qualities as diligence and obedience, they cannot test one's sense of duty or interest in the work one is doing. An examination will never test sympathy, or the power of working with and influencing others — powers that are absolutely essential to a teacher. In other words, an examination cannot test the whole man.

It is necessary to discriminate between the two uses of this test. Latham says that examinations have two uses: (1) "that in which the object is to select the most suitable person for a certain purpose, or the man of the most general ability;" (2) "that in which the object is purely educational." This separation is, however, ideal rather than real, as the use of examinations as a means of selection necessarily affects the sort of education that will be offered. It is impossible to discuss adequately examinations as a means of selection without considering them to some extent from a purely educational standpoint.

In education intended to fit for an active career, instruction and acquirement are very important, while for fitting for a competitive examination they are everything. The proper education for a boy must include — besides getting knowledge — growth in character, gaining the power of doing the thing he wills, and in *getting* on with other human beings in other relations. No examination can aid in bringing this about; in fact, they may check the growth of these qualities on account of the difficulty of obtaining these two elements — knowledge of the work and disinterestedness. So far, however, we seem to be unable to get along without examinations as a means of selection, whatever we may think of them from a purely educational point of view.

In spite of these limitations, however, I feel that many of the protests against the use of examinations are ill-considered, to say the least. They seem to be a protest against all tests. One might think we were about ready to return to the old scheme of substituting individual, capricious judgment for systematic tests. There is a fallacy in the scheme, for judgments — no matter how capricious they may seem to be — are based upon experience, observation, examination of person, and circumstances. But how is this judgment to be formed; upon what is it to be based, if it is not upon judgment as to what one knows, upon judgment as to what one can do? Can this be ascertained by a knowledge of physiognomy, phrenology, social standing, good clothes, or general personality? To some extent I think it can; but no matter by what names people may call this test, they will always be compelled to make some examination, formal or otherwise, as a basis of selection. They will always be compelled to apply some test. Perhaps some people can judge best by the lines of the face, the size and contour of head and jaw; but for the ordinary man a written examination seems to me to be less objectionable than anything else that has been proposed for general use in selecting teachers and other officials.

Back of any theory of examinations there seems to lie a presupposition that there is some relation between knowledge and power. People unconsciously work on the theory that the man who knows is the man who can do, even if they do deny Bacon's aphorism that "knowledge is power." Dr. Dewey says that on the evolutionary theory of development we cannot explain the selection and preservation of brain power on any other supposition than that it enabled its possessor to do something — except on the theory that it has some value as a means of preservation in the struggle for existence. The animal with the greater intelligence or the greater knowledge has an advantage over his competitors in the struggle for existence. Evolution seems to teach that knowledge is power. It seems natural, then, when it is impossible to submit the applicant for a piece of work to a test of doing, to make him submit to a test of knowledge.

We must admit that an examination in many cases will determine not so much the applicant's ability to do the thing desired as his ability to tell how it should be done. This can sometimes be learned from books. People may learn from books something about how schools should be taught, but the skillful examiner can, I think, always tell the difference between the applicant who speaks from experience about doing a thing and the one who has merely "crammed" books on pedagogy. One would have to admit the impossibility of picking out a Mark Hopkins by an examination which called for information about pedagogy. Still there must be a certain sort of relation between knowledge and the ability to do some piece of work based on that knowledge. The man who has the knowledge is apt to be interested in doing the thing. This knowledge has usually been acquired in doing the thing. The one who has the best assortment of knowledge about a particular piece of work is, other things being equal, the best prepared to do it.

I believe that there is a closer relation between having the knowledge and doing the thing in the case of the teacher than there is in the case of the policeman or some other public official. Teaching calls for ability to state clearly what one knows. This is part of the equipment of a teacher, while the ability to talk on the part of the policeman may have very little to do with his efficiency. As "Sammy Weller" says, "on the contrary it's quite the reverse." But the teacher who is dumb in the presence of a problem demanding solution, who lacks the power of expressing himself definitely and accurately, must in some degree be unfitted for the work he has undertaken to do.

We hear a good deal about the inability of teachers and others to do themselves justice in an examination. This is given as a reason for abandoning them as a test. To my mind there is very little in this proposition. A successful teacher must have self-possession and self-mastery. He must be able to do, under trying conditions and under time conditions. A teacher who is unmanned by the presence of a difficult thing to do, who loses his self-possession and self-mastery, confesses judgment so far as his ability to be a successful schoolmaster is concerned. No matter how much force we may be inclined to give to this matter of nervousness in an examination of delicate children in a public school, we should not give it any weight in a test of applicants for the position of a teacher. The teacher must have self-control enough to meet this test, or he will be worth little to us in the schoolroom.

We hear and read a good deal about "cram." People use the word "cram" as a substitute for thinking, for argument, and it enables them to damn almost any sort of a thing they do not approve of. It is often assumed that almost any preparation for examination is, to some extent, a hasty, crude, and dishonest preparation. It is taken for granted that the power to prepare for an examination in a definite time is not a thing worth testing for; but, to my mind, a man or a woman who has the ability really and thoroly to prepare for an examination has in him the right sort of stuff of which to make a teacher. The teacher as well as the lawyer must possess the power to go to the right place for material, and to use this material when he gets it. If cramming means only hasty and crude work, we shall condemn it, and I believe an examiner will detect it. If cramming, however, means simply the ability to go to the sources of information, select the proper materials, and prepare thoroly to meet the test of a certain situation, the power to cram is a power that everyone should wish for, and no one more so than the teacher, who should prepare for his lessons every day of his life.

Again, it is impossible, if we mean by "cram" hasty and crude study, to cram for many of the subjects in a good examination. Many of the lists of questions are tests of the power to do things. If one prepares for examination in mathematics, in the sciences, and in many other subjects, he must do something besides hasty and crude work; he must have made long and continuous effort along definite lines, and in the doing of this he must have acquired power that is valuable to one in whatever business he may be. I think, then, that "we should clear our minds of cant," as Carlyle would say, and stop and ask ourselves the question as to what we mean when we talk about "cramming" for examination.

There is much to be said for the use of oral examinations to supplement the written ones. An oral examination will permit one to probe deeper along certain lines of power or knowledge that the applicant seems to possess than a written examination. In a written examination we have to aim at things in a more general sort of way. In an oral examination we can adapt our questions to a particular preparation, a particular power, of the individual, and we can sometimes come much nearer in getting a clear judgment of him than we can in a written examination. But the oral examination must necessarily be discontinuous and fragmentary. If there is any unity and sequence in an examination, it will be because it is put there by the teacher. One who reads the dialogs of Plato will readily see that whatever of unity or sequence is given in an argument is given, not by the person questioned, but by the questioner, Socrates. If you wish to test one's grasp of a whole subject, the written examination will serve you better than the oral examination.

Conceding the value of examinations as a means of selection, it is still true that the results are chiefly negative, and selection based upon an examination never entirely proves fitness for a piece of work, and, in many cases, examinations will even fail to demonstrate the unfitness of the applicant. Teachers should never be fully and finally admitted into a system of schools as a result of an examination. Some trial must be given them before they are assigned to permanent positions, some test of their ability to do (as well as their ability to talk about doing) must be made, if we hope to keep the unfit from our schools.

In Chicago we have two classes of elementary teachers, i. e., those who enter from the normal school after a two-years' course, and experienced teachers who come in from the outside as a result of an examination. In both cases teachers are compelled to demonstrate their fitness during a probationary period of four months. In both cases the certificates given them are good for one year only, the superintendent having the power of refusing to renew them. Only after two renewals are teachers in Chicago given permanent certificates. We have come to the conclusion that, while examinations are a necessity as a means of protection against imposition, the examination must be supplemented by actual test in the schoolroom.

DISCUSSION

W. W. STETSON, state superintendent of public instruction, Augusta, Me.— I trust I am saying nothing unconventional when I remark that the paper presented by Superintendent Cooley impresses me as one of unusual merit. I realize that I am saying nothing startling when I observe that I agree with the facts stated and the gospel preached. I must be excused, however, from attempting to discuss this question from the Chicago altitude or the vantage ground of Illinois, but instead I must be content to consider it from the Maine standpoint.

There are four items which, it seems to me, we may consider as settled: (1) We cannot gain much information as to a teacher's fitness to be licensed by asking her questions she cannot answer. (2) We ought not to forgive ourselves if we indulge in that form of idiocy which asks for details no intelligent teacher should be expected to know. (3) The candidate has a right to a fair chance to tell what she knows. (4) What she has done and what she can do should be considered in granting a certificate, and these items should be placed to her credit, in definite form, on her certificate.

The following plan has been used in Maine during the past five years. Its success has more than vindicated its usefulness. That its fairness has appealed to the teachers of the state is proved by the fact that nearly one-fourth of the members of the profession have applied for certificates, and that more than one-sixth of our teachers have been licensed under this system. The plan may be briefly outlined as follows:

A preliminary examination blank is sent to each candidate, upon which she makes a record of her name, age, post-office address; the schools she has attended, with the time she was a member of each; the schools she has taught, with the time she had charge of each; the official positions she has held, with the term of office of each; the subjects in which she has received special training; the branches she prefers to teach; the titles of at least five books she has read on history, science, literature, and pedagogy; the names of the magazines and professional papers she reads regularly; the names of the educational associations of which she is an active member; and the names of five persons who are not related to her by blood, or connected with her by marriage, or associated with her in business, and who have a knowledge of her schoolroom work, and are capable of giving an estimate of the same.

The candidate may be asked to give an abstract of one of the books she has read, and a judgment of its merits, together with a brief biography of its author. She also may be required to give such a description of some one of the magazines or papers included in her list as will indicate the intelligence and regularity with which it is read.

If it is evident from the preliminary examination that a teacher has limited her reading to trashy literature, this evidence of unfitness must be overcome before the department will issue a certificate. The teacher may not have read all the latest books on pedagogy, but she is forgiven if she has read the chapter on "Old Domsie" in *Beside the Bonnie Brier Bush*, has caught the spirit embalmed in *The Evolution of Dodd*, and has learned to sympathize with *Sentimental Tommy*. She is even told to go her way and sin some more — along these lines.

Slips containing the following explanations and questions are sent to three or five persons named by the candidate as references:

STATE OF MAINE: EDUCATIONAL DEPARTMENT.

M..of......................... ....

has referred to you as one not related to her by blood or marriage, nor associated with her in business, and as having personal knowledge of her character and worth as a teacher. Will you please fill the annexed blank, using one or more of the following words in giving answers to all subjects of inquiry except the last, namely, "Excellent," "Good," "Fair," "Poor," "Very Poor"?

If your answers are favorable, your name will be placed upon the back of the state certificate for which the person named is applicant; if unfavorable, your name will not be used, and your answers will be held *strictly confidential*. For the benefit of the candidate this return should be made *at once*.

W. W. STETSON,
State Superintendent of Public Schools.

ESTIMATE OF CANDIDATE'S FITNESS

(1) Moral character? (2) Success in gaining co-operation of pupils and parents? (3) Tact in directing and controlling pupils? (4) Interest in work? (5) Energy? (6) Enthusiasm? (7) Skill in instructing? (8) Power in stimulating pupils to do their best? (9) Influence over pupils out of school? (10) Efforts for self-improvement? (11) Extent of general reading? (12) Manners as influencing those of pupils? (13) Capacity for work? (14) For what kind of school would you recommend the candidate?

Signed.................. ....

P. O.... ....

The candidate does not know which three of the five references are interviewed. The replies received are averaged and recorded on the face of the certificate in a column numbered 1, and a record is also made of the preliminary examination on the back of the certificate. This document, when properly filled out, gives a complete pedagogical history of the person holding the same, together with the estimates of three competent judges who know personally of the holder and her work. It also includes a license to teach in primary, grammar, common schools, or public schools, and is valid for one, three, or five years, or for life.

On a day previously announced, the candidates assemble at convenient centers, and written examinations in the several studies are given. These papers are returned to the department and are ranked, and the credits are entered upon the certificate in the column numbered 2.

It will be seen that three items are taken into consideration in licensing a teacher: first, her personal and professional record; second, the testimony furnished by three competent persons as to her ability and her success in the schoolroom; third, her scholastic attainments as manifest in her written examinations.

The following advantages are claimed for this system of issuing certificates: first, it is just to the candidate; second, it reveals to the applicant, in tangible form, her merits and defects; third, it gives full credit for ability, scholarship, experience, effort, and skill; fourth, it furnishes school officials with a reliable statement of the quality and power of the person applying for a position.

MISS MARGARET A. HALEY, of Chicago.—I should like to ask Superintendent Stetson if he can get teachers with all the accomplishments he has mentioned for $38 per month.

SUPERINTENDENT STETSON.—Many are giving their time and their best knowledge and culture for a sum so small that they are unwilling to reveal it.

MISS HALEY.—Do the graduates of Smith and Wellesley Colleges support themselves on the small sum mentioned?

SUPERINTENDENT STETSON.— These persons are native-born, Simon-pure maniacs, and are waiting for an opportunity to marry men with money enough to support them and supply them with the necessary amount of money to carry on their work.

SUPERINTENDENT F. LOUIS SOLDAN, of St. Louis.— Examination of principals and teachers brings to light other important points aside from determining the academic proficiency in the studies he or she is expected to teach. Examinations aid the superintendent and examining committee in determining traits of character and the moral proficiency of the candidate. These traits of character may not always be determined directly, but indirectly. It is sometimes true that the teacher who receives the highest per cent. on an examination is the weakest teacher, but this is the exception, not the rule. It is not generally true that those teachers who pass the best examinations are among the strongest teachers. Under our rules for examining teachers, we hold an oral examination as well as a written. The oral examination always follows the written. We use the oral examination to find out what a teacher really knows about the subject, and thru this medium, by a careful method of questioning, we are enabled to discover something concerning the teacher's personality and power. For instance, the teacher is asked to read a certain selection and encouraged to talk about it. He is asked what his favorite book is, and he is given a chance to tell what he knows about the book. We find it an easy matter to have the resident teachers of our own cities or state take the examination before election to positions in our schools, but it is often impracticable to ask those who live a long way from St. Louis to come and take the examination in advance. The trip is expensive, and we cannot guarantee them a position in advance of the examination. For these reasons our board of education has adopted the plan of permitting principals and supervising teachers to come into our schools, after looking them up, and occupy positions upon probation. This gives us an opportunity to gain a knowledge of their practical work and special fitness for the work to which they have been assigned. If at the close of the intervals of probation their work is satisfactory, they are allowed to take an examination and certificates are issued to them.

SUPERINTENDENT CHARLES R. SKINNER, of New York.— How does your plan for examining inexperienced teachers differ from that of examining experienced teachers?

SUPERINTENDENT SOLDAN.— Inexperienced teachers are not permitted to enter the schools upon probation without an examination, while experienced teachers are.

SUPERINTENDENT L. E. WOLFE, Kansas City, Kan.— Is it really worth a teacher's time and efforts to cram for an examination? I think that examinations should be so set that they will parallel the necessary preparation. Appoint a committee upon examination to prepare a set of questions that will test a teacher's skill on what she will be required to teach. The questions usually prepared in reading are not at all a test of the teacher's ability to teach reading. This same criticism is more or less applicable to many other branches upon which teachers are examined for certificates to teach in our city schools.

SUPERINTENDENT J. F. KEATING, Pueblo, Colo., asked Superintendent Soldan why he required a teacher to take an examination after she gave evidence of her fitness as a teacher.

SUPERINTENDENT SOLDAN.— Real scholastic ability goes beyond the ordinary requirements of a schoolroom. A teacher should be broader than the text book and the mere outline of work she is expected to present to her pupils.

SUPERINTENDENT GREENWOOD, Kansas City, Mo.— I should place the names of teachers and principals resident in the city who have given evidence of careful preparation and skill for the work on the approved list.

SUPERINTENDENT JAMES A. FOSHAY, Los Angeles, Cal., asked Superintendent Soldan for what time he appointed principals without examination.

SUPERINTENDENT SOLDAN.—For the remainder of the year at the close of which an examination will be given him. If he is not prepared on all the subjects in the usual list, substitution of studies of equal value is often permitted.

SUPERINTENDENT C. G. PEARSE, Omaha, Neb.—Examination of teachers should be held to protect those whose duty it is to employ them.

DR. E. E. WHITE, Cincinnati, O.—We have not yet discovered the best method of examining teachers. So long as we make no discrimination between the beginner and the experienced teacher, so long will the profession be unrecognized and unformed. A qualification in one state is not usually indorsed in another. The profession of teaching ought to recognize permanent qualifications for the work. A certain degree of preparation and certain tests that may be made from time to time should be allowed to take the place of any future examinations. Our custom is to continue to examine teachers too long.

THE PRACTICAL APPLICATION OF ALL LEARNING TO BETTER LIVING

DAVID L. KIEHLE, PROFESSOR OF PEDAGOGY, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN.

Life is the supreme treasure of humanity. Whatever it contains, whether much or little, it is still the most desirable of all things. "All that a man hath will he give for his life." Even when reduced to mere animal existence, it is still his precious treasure. And the history of the human race may be comprehended in the single aim, to make life more worth living, to enlarge the content of the ideal, and accordingly to appropriate or utilize man's environment to this end.

Education, as the handmaid of civilization, may be comprehensively defined as a preparation for living. It has never been dissociated from this dominant idea of life, and therefore has always, in some sense, been practical. The form which education has assumed at various times has likewise been determined by the form which these two ideals have assumed, namely, (1) who are entitled to a living, interpreted in its highest meaning? and (2) in what does living consist?

In general, we may say that the governing class — those who represent the institution in its governmental and social capacity — have claimed for themselves the right to represent in themselves the highest ideal of living. This they have claimed in its honors and comforts. They have not only excluded all others from the privileges they have enjoyed, but they have made all others contribute to their living by every necessary sacrifice of comfort, of convenience, and even of life itself. Education has therefore always been for the recognized dominant class, who have alone been given the opportunity to prepare for living. We shall find in our study of education that, with the expansion of this idea of the dominant class, the forms of education have changed to include the new classification, and also a change in method to prepare for corresponding life.

Introductory to our discussion of modern education, let us recall a few prominent historical illustrations.

The Athenian state was a pure democracy. The citizens of this city-state numbered some twenty-five thousand, and were the governing element of a community ten times as great, consisting of slaves, peasant farmers, tradesmen, and the like. The high ideal of these free citizens was philosophic leisure. To this end their education provided a most complete and harmonious culture—physical, intellectual, and social—in the palæstra, the gymnasium, the military service, the games, the theater, and the forum. But this most remarkable system was confined to the few citizens of the state, citizens who were relieved of toil, trade, and all occupations of industry, these being left to slaves and foreigners. Their system of education, so complete when considered with reference to their ideal, was correspondingly narrow. Gymnastics for the body, and music for the culture of the soul in æsthetics and philosophy, comprehended the entire range of their education. Commerce, manufacturing, and domestic arts being occupations of slaves, foreigners, and women, the subjects themselves could find no place in the curriculum of freemen.

Passing now to the Middle Ages, when the Christian church was the educator of the world, the clergy were the dominant class. Life for them was religious, and education was especially for them as guides and teachers of the people. In this period philosophy was made the handmaid of theology. The product of Roman civilization in Roman law was made the foundation of canon law, even as temples and basilicas of pagan Rome were transformed into the churches of Christian Rome. Later, as in the twelfth and thirteenth centuries, as state governments began to form and take somewhat independent direction of affairs, Roman law became the foundation of civil law. Thus it was that the universities of Europe developed a curriculum intensely practical in the interest of the two great and dominant classes, the clergy and the secular aristocracy. This curriculum culminated in philosophy and theology, canon law, and civil law, to which should be added the no less practical one of medicine.

Again, as in the sixteenth and seventeen centuries, the democratic spirit began to appear, as the people began to realize that life was for them as well as for their lords, and that a share of the comforts of life was for them also; they began to claim for themselves the advantage of education in gaining a livelihood. They instituted guilds for the protection of labor, and schools for the better instruction of the laboring classes. These schools, so imperfect in their beginnings, grew to be the *Burger-* and *Realschulen* of Germany, the manual-training and polytechnic schools of America. Harvard and Yale and Princeton each provided an education of immediate and practical advantage to the clerical and legal professions, following the traditions of the past. If the representatives of labor—and in this I include all secular occupations of trade and the mechanic arts—pursued these collegiate courses, it would be for the general culture afforded by them, and not because they expected to make any practical application of learning to their several callings.

During the past century our school system, culminating in the university, has been greatly modified and expanded to satisfy the demands of industrial life. In the University of Minnesota we have colleges of law and medicine, of pharmacy, dentistry, civil engineering, electrical engineering, mining engineering, and mechanic arts, and, last of all, agriculture. So bountiful has this provision become that it seems as if no form of productive labor had been overlooked in the educational facilities of the state.

If, now, you will recall the history from which we have selected our illustrations, you will observe that as the people have gained freedom and recognition as citizens, with the rights of freemen, the system of education has gradually expanded to give practical preparation for the several interests which citizenship represents.

First, you will also observe that there have been two stages of development; the first was that of education for the governing classes, social, secular, and clerical. The second, and that with which we have to do, is that of labor, or productive industry—not to supersede the first, but rather to supplement it and give it a more extended application. Thus far, too, the progress of education, as we have considered it, has been confined to men, because citizenship has been for men. Authoritative direction in affairs of church and state, in matters social and industrial, has been limited to men. Accordingly, education in all its history has been for men.

In the earlier periods women were without either social or political consideration, and were consequently excluded from all privileges of education. It is only in recent times that the rights of woman and her position in state and church have come under serious discussion. As her rights of citizenship were recognized, she was admitted to the public schools, and the erà of coeducation began. But the schools to which she was admitted had been planned for the ruling classes. What she was to get was because of what she was, and what she wished to pursue, in common with men. This education began in the elementary grades, where study, like play and work, is quite the same for boys and girls. Later, as women have been admitted to colleges of academic and technical instruction, they have found the courses those that are demanded by men in the professions and the industries.

As women emerged from the seclusion and the limitations of domestic life to assume the responsibilities and to discharge the duties of citizenship, they first asserted their industrial rights—the right to work for pay, to undertake enterprises requiring skill—according to their own preferences and abilities. The industries and the technical schools opened to her were planned for men, and from them she must choose those adapted to her tastes and capacities. This condition has prevailed and still prevails thruout state institutions with few exceptions. In the University of Minnesota we have colleges of law, medicine, dentistry, several colleges of engineering, and one of agriculture, including instruction in dairying, horticulture, and general farming. From these women are free to select instruction on equal terms with men, and on the same terms offer their services to the public.

Surely this is great progress, and in which our own country takes precedence over all others. And yet this is not the goal for women and their education. The significance of what we have done is that, in so far as men and women have common abilities, common rights, and common aims, they may study and labor together; but beyond the point of differentiation, in a department of life which belongs pre-eminently and exclusively to woman, namely, the home and motherhood, no provision has been made. So noticeable is this neglect that the criticism has been provoked that we are educating shopkeepers and artisans — money-makers of our daughters, instead of wives, and mothers, and home-makers.

It is doubtless true that in the development of civilization the first attention is given to the forum and the arts of government and conquest; after these come the shops and the trades for the acquisition of wealth and the material comforts. But all this is only the beginning — the preparation for a living that is worthy the name. Until wealth brings its treasures from the shop and the bank to the home, in forms of use for the comfort of the family; until art learns to beautify the dwelling-place of the family life as well as the cathedral and the capitol; and until science devotes itself to the healthful rearing of children and the hygiene of the home, all these forces of our modern civilization of which we are so proud fall far short of their highest service, and that to which they were destined.

And this final and noblest application of wealth and learning must be effected in the education of women. With equal rights to do what they may do in common with men, they must be permitted to continue their education in preparation for their higher duties of the home, which they alone are able to make and adorn.

I do not hesitate to affirm that, if the subject is to be estimated from the standpoint of science and education, there is as much intelligence and good judgment required in applying science to the care of home and its children as to the care of the stock on the farm; and that it comports with the dignity of any educational institution to apply the principles of chemistry as well to the making of wholesome bread for the maintenance of health as to the mixing of drugs for its restoration when lost thru ignorance of the laws of health.

So far in this discussion the progress we have noted has been in our higher institutions, and for the training of specialists of high grade in the several industrial lines of modern life. This demand of our times that our education should contribute to the better living of the people has found tardy response in the high schools of our states. These high schools are the colleges of the people. They must not only fit the few for the higher institutions, and for the special courses, but they must give the final preparation for practical life to the majority of its students. The positions to be filled by those who are graduated from these high schools are, in the main, common forms of business, the trades, farming, and, for young women, the duties of home life.

That the high school and every other school should, in its appropriate way, represent and keep before its pupils the highest aims of education must not for a moment be lost sight of. Its spirit should be to encourage every youth to make the best of himself and the most of life by the highest culture which his circumstances will allow, and by his intelligence and skill to make himself a part of the largest world of human interests and activity of which he is capable. Nothing would be more calamitous to our high schools than to close the avenues to a high culture, and to give undue prominence to mere money-making occupations of life. Having guarded this aspect of the high school, I may say, without being misunderstood, that, inasmuch as life must be lived by the largest portion of the people without the privileges of a collegiate education, it is the duty of the high school to educate this body of its students to the best ideas and the most practical application of them to the station they are to fill. This is especially important in regard to the industries. Until the era of popular education, the educated classes were occupied with social, governmental, and professional duties. The industries were followed by the uneducated classes. The aristocratic application of education, more properly named training, for the improvement of menial service did nothing toward popularizing industrial life, and in giving it rank with the occupations of the cultivated classes. These young people who are in our high schools will not enter the class of menials, no matter how excellent the training. If, however, the useful industries, as manual training and the domestic arts, are given an educational and a culture value in the curriculum of our high schools, the problem has found a solution. The claims of such commercial courses as bookkeeping, typewriting, stenography, and the like, that are now being urged upon our schools, in educating and social value, are not to be compared in importance with those I have named, and for reasons such as these:

1. They are urged by the spirit of trade—a spirit which is already a dominating one in our American life.

2. The elements of commercial transactions ought to be provided as a practical application of, and within the time given to, writing and arithmetic.

3. In educational value the subjects I have named are immeasurably superior. Domestic science requires skillful application of the best results of the sciences of physiology, hygiene, and chemistry. Manual training is an application of geometrical conceptions of forms, in accurate observation, comparison, and judgment, in forms of wood and metal, and also an æsthetic adaptation of the same to useful ends.

4. But, above all other considerations, these subjects foster those forms of life which, for reasons already given, have been in disrepute, and yet are most important to comfortable living. We are already under the influence of a money-getting, commercial spirit, which is intruding upon the quiet comforts of home life, and diverting our youth from occupations which require diligent and steady application to employments that promise moderate yet certain and steady returns in profit. Our young women have already too many encouragements to take positions of public service in shops, stores, and offices; and our schools as promoters of high ideals of life and service owe it to themselves that these subjects receive the attention they deserve.

The educating policy of continental Europe has been to improve the intelligence of the people in order to make them more efficient in their respective spheres of life, and thereby to increase their usefulness to society above them, as well as to add to their own happiness, but without disturbing the traditional class distinctions as they exist. In America the opposite idea has largely prevailed ; those in humbler life have been taught that education is the avenue of escape from the sphere of life into which they have been born, and with which the evils of life have been associated. Under this impulse our educational system has fostered a general migration from domestic and industrial life. Our daughters are headed away from the home fireside, and are strung along the way from the merchant's counter and stenographer's table up to the practice of law and medicine. Our boys have dropped the hoe and the hammer, and are headed for the town to become clerks, doctors, lawyers, and legislators.

Now, it is not in my mind to condemn this view of education or to oppose it ; but I do urge that we enlarge our views to include that other idea, that education has for its aim a preparation for a life of comfort and honor in every walk of life. It is to furnish our youth with culture of mind and heart that will make them noble men and women, and with the necessary skill of hand that will make home a place of refinement and health, and the shop a place of intelligent and remunerative industry. It is to make all industry of cultivated life honorable, to encourage every young man and woman to seek and to occupy the largest place of usefulness to which he is by nature adapted, to avoid none as if it were menial, and to make home life the center to which art, science, and wealth make their final and choicest contribution.

It is not only that education should prepare for a better living, but it should teach what a better living is. Next to living, the greatest problem of life is, what is good living? And the greatest obstacle to a good system of education lies in the misconception of society respecting the kind of a living that is most worthy of our seeking. No one can object that man's first effort is for bread for himself and his children; and until this demand is satisfied it is useless to interest him in anything else. But having bread, he should learn that the delights of life do not increase with the accumulations of bread in the forms of money and bonds. Our schools and our learned men have also to learn what the proper service of education is, and what the final end of its acquisitions in use. Explorers and searchers for things new, whether it be for new continents, new laws of science, or new philosophies of life, are great contributors, and deserve great honor, but these do not rank highest. They are but the forerunners of those who apply things new to the better living of the people; those who colonize the new worlds and establish governments of freedom of the oppressed; those who utilize science for the improvement of social conditions to make more people happier and better, and who multiply happy homes with happy children.

Our great men, in great institutions, have too often forgotten this. They have risen so high into the sphere of the general and the abstract that they have forgotten their highest mission. The aimlessness of the study of philosophy was exposed by Malebranche in the confession that if he held truth in his hand he would let it escape that he might enjoy the pleasure of its pursuit. Modern science, in a like spirit, assumes that all that is not pure science is impure. A German professor objects to applying calculus to concrete things as falling bodies and other physical phenomena. Another professor has introduced some new phase of mathematical science to his audience after this fashion: "Gentlemen, I am pleased to assure you that this is a chapter in mathematics which can not be applied to any practical purpose." Those men who devote themselves to investigation and discovery must not forget that their honors will not be awarded until they or others have given their discoveries value in some practical application to living. In our day it is the people who are supporting education, and not princes nor a scientific aristocracy. The people are interested in nothing so much as living; and they who are nearest the people are the men who take the crude material of discovered truth, which these miners have sent up from the dark chambers of their hidden lives, and have reduced them to forms of utilitarian beauty, to increase and to improve the happiness of men. And this test is being applied to our entire educational curriculum. Humanity has no use for "art for art's sake," for culture as an end in itself, nor for a science that disappears with its votaries in the realm of the abstract. The supreme test of educational values is: How do these things relate man to life? What better interpretation of living do they give? And how do they contribute to better living?

DISCUSSION

Professor George E. Vincent, University of Chicago, Chicago, Ill.—I am glad that my extemporaneous remarks are not typewritten and in the custody of the secretary, for Dr. Kiehle's comprehensive discussion drives me to the refuge of the university man —the field of the doctrinaire. Bear with me, therefore, while I philosophize briefly in what may seem far from a practical fashion. At the outset let me assert that in all this world the most practical, accomplishing force is the ideal. This is the one thought which I shall try to elaborate in the few minutes assigned to me.

Three words in the topic of the hour I select as significant and as involving the questions at issue. These words are "practical," "application," and "better." What is a *practical* use of all learning; what is involved in its *application;* and what is *better* living? These are the problems.

It is our habit to think of the mechanism of life as the chiefly practical thing. We naturally pride ourselves upon the railway, the telegraph, and the telephone, upon the factory and the printing press. But these are, after all, merely the machinery, the means of life, not life itself. To exalt the mechanism above the ends which it serves is to blunder sadly. The real motive power, the force which brings things to pass, which is truly practical, is the imagery which fills the minds of men, the pictures which arouse their enthusiasm, the visions which inspire them to effort. The fundamental problem is to translate knowledge into ideals, to transmute learning unto an inner light.

Every society is to be judged finally, not by its beautiful wares, its cunning contrivances, its treasures of art, but by the mental pictures of character, conduct, and destiny which arouse purpose and activity in its men and women. The chief task of a nation, then, is to energize its knowledge, to organize its learning into leading.

The word "application" has for me an unfortunate suggestion. It somehow seems to imply an external, inorganic relation. One thinks of something fastened on or added from without. This may seem merely a quibble about terms, but I fancy a misconception lurks beneath the word. The learning which becomes truly practical cannot be applied or added to either individual or institution or society. It must be taken up into the life of persons and people. It must be a growth in the very fiber of the citizen and the state. The teacher who regards the studies of the school as external entities to be applied to the pupils is hopelessly a machine. Literature, history, art, science become a living, organic whole in the personality of the true teacher.

Nor can any educated class in a nation apply learning and art and idealism to their humbler fellow-citizens. These things must live in the minds of the many. Leadership and suggestion are powerful forces, but there is no alchemy by which "leaden instincts can be fused into golden conduct." A people becomes wise and brave and just only as the imagery of truth and courage and righteousness fills the minds of its men and women. The glory of democracy lies in its faith that the many may live this richer, fuller life.

Nevertheless, the few must discover the truth, translate it into ideals, and put these at the service of all. It is an inspiring task that may well arouse the noblest souls. Think of the devotion of these explorers! I am not wholly content with Dr. Kiehle's imagery of the miners at work in their deep shafts, if that implies narrowness of view and interest. Nor can I feel that "truth for truth's sake" is not a noble quest in itself. It may be a subordinate aim in the hierarchy of purposes which the ideal of social service dominates, but it rises far above many of the practical and sordid ends which men and women are far too prone to seek. May our scientists never cease the pursuit of truth as an ideal end, as well as a means to a larger life for all mankind!

But knowledge cannot in itself fire the imagination and urge men to action. Sentiment must provide the motive force. Ideals are impotent unless they arouse instant response of emotion, resolution, and effort. We cannot neglect this all-important factor, this passion for realizing the nobler pictures which pass before the mind. However we may conceive religion, its essential part in the life of men cannot be denied. In these days when theological formulæ are being revised or translated into the new "language of the times," the thoughtless may fancy that religion is passing; but those who peer deeper see that the fundamental facts of religion, ideals of righteousness and fervent purpose to realize them, were never more potent than today. Religion as the passion for perfection, seeking the divine truth, and pressing ever toward loftier planes of individual and community life, is a permanent force in social evolution.

I need not dwell upon the meaning of "better living." Life is to be judged finally by the imagery, the ideals which pass in ceaseless panorama before the minds of men. In so far as these pictures present the richer, nobler aspects of conduct and aspiration, existence passes over into living. Thus again we reach the assertion that the most fundamentally practical task of every people is to produce and diffuse the imagery which will inspire its citizens to the highest aims.

Truth, purpose, and effort, then, are the necessary factors of achievement, of practical accomplishment. In a general way, this is no time for nice discriminations. Science, philosophy, and religion stand for these three things: science gathers facts and formulates laws; philosophy unifies these into a theory of life; religion transforms this theory into dynamic power. Not one of these factors can be neglected. Each is essential. The absence of science means ignorance and fanaticism; the neglect of philosophy leads to mental anarchy; the decline of religious fervor spells apathy and stagnation. We rejoice in the conquests of science because they contribute to an ever truer philosophy of living, a more and more accurate picture of what is, a loftier and more imspiring vision of what may be. Philosophy — and with this I include theology — becomes increasingly a social philosophy. All knowledge is brought to bear upon the common life of men, not only to produce more goods, but to give each one a more vivid image of himself as a member of society. Thus the old artificial individualism yields to a truer picture of social solidarity, and the person thinks himself in terms of his fellows. Religious enthusiasm, a zeal for righteousness, seizes upon this new ideal and infuses new fervor into daily duty, civic loyalty, and public service.

This in brief outline is the mighty movement by which deeper learning passes into richer living. Let us not overlook this fundamental task — the most vital and practical which we can further. Nor should we waste time in idle disputes as to the relative value of science, philosophy, and religion. It is vain to give precedence when all are essential and interdependent. Science furnishes materials for the ideals of life and conduct which philosophy creates and which religion urges into action.

These ideals are the practical forces which bring things to pass. They are the ends which mechanism serves. They are, in Watson's phrase, "the things that are more excellent."

The grace of friendship, mind and heart,
Linked with their fellow heart and mind;
The gains of science, gifts of art,
The sense of oneness with our kind;
The thirst to know and understand,
A large and liberal discontent,
These are the goods in life's rich hand,
The things that are more excellent.

N. C. **Schaeffer**, state superintendent of public instruction, Harrisburg, Pa.— Teaching consists in getting another to learn. The word "learning" may mean the activity by which the mind acquires knowledge, or it may mean the results of that activity and thus be synonymous with the knowledge imparted at school. Using the term in the latter signification, we may say that, as applied to better living, all learning falls under three categories.

First, the learning that exerts no influence upon living. In the days when Cicero spoke and Vergil wrote, there were men so rich that they dissolved pearls in goblets of wine to make the drink more costly. The names of these millionaires are almost forgotten. To teach their names exerts no influence upon the lives of the students. What application to life can be made of the knowledge implied in questions like the following: Name the English king who died in a carriage; the spy who was caught in the attempt to carry a message in a silver bullet to General Burgoyne; the soldier who escaped at the battle of Thermopylæ. Is it the duty of the superintendent to exclude from the curriculum all knowledge that does not conduce to better living?

Secondly, there is the knowledge that is helpful in bread-winning, in money-making. Talk against bread studies as much as you please, the struggle for existence compels most pupils to seek knowledge that will be of use in making a living. When man's powers are exhausted in the struggle for existence, as during war, the very name of letters is a mockery. The demands of the body must be met if there is to be leisure for the things of the mind and the higher life.

Thirdly, there are kinds of learning or knowledge which conduce to the higher life of thought, faith, hope, love. That which makes life worth living is love of kindred and friends, of home and country, of truth and of God, and of all that is highest and best in God's universe. The kind of knowledge, for instance, that stimulates patriotism is of supreme importance in the curriculum. The lessons in civil government should beget a love of country that will make the boys and girls willing to contribute their share of tax for the support of the government and the education of the people. Education is the common religion of the American people. We all repudiate Herbert Spencer's doctrine that the taxation of one man to educate another man's children is robbery. We all firmly believe in taxation for school purposes, but we prefer to let the other fellow pay the taxes, even if it is necessary to do this thru the coffers of a corporation. Tax-dodging has become a fine art. The school should inculcate the knowledge which bears upon this and other duties of a citizen.

Learning may signify the activity by which knowledge is acquired. The test of good teaching is thinking. In the act of learning, thinking gives rise to permanent knowledge. No one has been fool enough to advocate the introduction of chess into the curriculum, altho a game of chess begets intense thought. Good teaching cannot rest satisfied with learning that culminates in mere knowledge. Knowledge of history must be applied to life's duties: its lessons must cause a pupil to love his country, make sacrifices in its behalf, and, if necessary, die in its defense. Thru the transformation of knowledge all learning should conduce to better living, not merely to the enjoyment of physical comforts, but also to the enjoyment of the things of the mind and the higher life. This is the problem that keeps the superintendents awake at night, and is of infinitely more consequence than the little details of supervision to which some would confine the discussions of the Department of Superintendence.

MRS. VIRGINIA C. MEREDITH, St. Anthony Park, Minn.—Dr. Kiehle sounded an important note when he spoke of the education of woman for the duties of the home and motherhood. The home protects the child. The home is an important institution; the women who are to direct the affairs of the home should receive special and ample preparation for their work. The knowledge woman possesses regarding the economy of the home will determine the proper expenditure of money for the needs of the home; hence the importance of a careful training for a wise direction of home affairs.

SUPERINTENDENT FREDERICK TREUDLEY, Youngstown, O.—I wish to speak of the spiritual frontage of life. All living that is possible to the individual is organized from the plains of life. Women should know more of the lives of real spiritual characters and possess their strength in order to perform the functions of mother in developing child life in the home. Fathers should remember the duties of the home and society, and by their conduct should quietly and unconsciously shape the lives that come under their influence.

INFLUENCES THAT MAKE FOR GOOD CITIZENSHIP

HENRY P. EMERSON, SUPERINTENDENT OF EDUCATION, BUFFALO, N. Y.

Last September I observed for half an hour the proceedings in the trial of Leon F. Czolgosz, the murderer of President McKinley; I heard the prisoner say, in answer to the usual questions in regard to his age, occupation, and education, that he was born in the United States, and had attended public and parochial schools. Taken in connection with his oft-repeated assertion that he considered it his duty to kill the president, this answer naturally made a deep impression upon at least one person who had given over twenty-five years of his life to the work of training the young. Believing, as I always have, that a public school is in itself a social community where the child learns, if he learns nothing else, the necessity for subordinating his individual will to the welfare of the whole, I determined to learn more, if possible, as to the school life of the assassin. Eminent alienists declared him sane, but all that he said or tried to say bore evidence of illiteracy and neglect. His very appearance indicated weakness of mind and body. He seemed to me a type of character that some of us have become familiar with in city truant schools. Czolgosz stated that he had lived in Cleveland, Detroit, and Alpena. Replies which I received from the public-school authorities of the above-named places make it evident that no public school, and probably no parochial school, is responsible for this abnormal and defective character. He attended an evening school in Cleveland for a few weeks only. So far as I have been able to learn, this is the only schooling he ever had. But, even if no school is responsible for Czolgosz, it is a serious question whether the communities in which he lived while he was of legal school age were not responsible for his lack of training. Our compulsory-education laws are based on the theory that a community, for its own protection, as well as for the good of the child, must make it impossible for any boy or girl to grow up in ignorance, a stranger to the ennobling influences which every good school exerts.

Without regard to who was responsible for such a product as Czolgosz, the terrible tragedy of last September ought to give new importance to the question whether we are doing all we can in the direction of moral training and preparation for life; whether we are doing all we can to make the young appreciate the necessity for government as a guaranty of law and order and liberty; whether we are imparting right ideals as well as information; whether we are giving as much thought to the work of inspiration as to the work of instruction.

I admit that any attempt to secure these higher results in education is sure to meet with obstacles. In the first place, there are always timid souls who fear that the conscience is to be interfered with. A leading newspaper of one of our large cities has recently asserted that it is dangerous and un-American to make any attempt to influence the character of the young. Such people somehow confuse religion and morality, and claim that it is the business of the state simply to teach facts. They would secularize education to such an extent that even the emotional nature is left untrained and atrophied.

One obstacle is found in the lack of co-operation on the part of the home. I am naturally an optimist, and it is hard for me to believe that people at large are less moral or live upon a lower level than thirty years ago; but it is plain that there is less moral instruction in the home; that there is more frivolity; that life is taken less seriously than a generation ago. You will remember how forcibly Herbert Spencer sets forth the inability of the average parent properly to train the child, the bungling and often cruel methods adopted to enforce discipline in the family. He evidently believes that, as a rule, the parents are more at fault than the children. Certain it is that when we consider the selfishness, dishonesty, and brutality of men as recorded in the newspapers and in police courts, and then remember that many of these people are charged with the training of families, we cannot wonder that the schools do not always succeed in turning out good men and women. The proper province of the school is to strengthen and extend the work of the home in the training of character, but, if this important matter is neglected in the home, it is all the more true that the welfare of the country is in the keeping of the schools.

Another obstacle in the way of this higher kind of education is found in a mistaken notion of school discipline. No school can exert a proper influence on the character of the young if the teacher is a mere martinet who looks upon good order, not as a means, but as an end. Moral training will never result from mere precision and perfection of system. Rigid courses of study and programs and electric bells will not alone build character. There must be at work the power and personality of a large-minded and large-hearted teacher interested in the welfare of the children. The school that runs like clock-work is not necessarily the best. To the ordinary lay mind fine buildings, showy architecture, steam heating, and expensive sanitation are the all-important things about a school system. They are important, but, after all, they amount to very little apart from the life and character of the teachers. Machinery is helpless unless the right motive power is applied. There is a tendency in all teaching to drop into mechanical methods, to become narrow and bookish, to make more of words than of the reality behind the words, to forget that the letter killeth but the spirit maketh alive; and a school or system of schools is successful in the best sense only in so far as it overcomes this tendency.

We turn to a pleasanter phase of the question when we consider the influences that help in the making of good citizens. Every good school does a work that we can hardly overestimate in building character. Habits of neatness, order, and punctuality; respect for, and obedience to, properly constituted authority; the training in attention when attention is necessary; lessons in application, in industry, and systematic method of doing things; the mutual concessions which are essential in school life—all these are training in character and preparation for citizenship. The simple fact that children form the habit of dressing for school, of keeping clean, of being on time, of performing certain duties at fixed times and in regular ways—these things influence character.

Every recitation, if conducted in the right spirit, affords opportunity for direct or indirect building of character. Biography, history, and literature afford the best means of moral culture, but the teacher who understands how to handle children can make them feel and enjoy the moral power of a principle in arithmetic or a rule in grammar. Any study, if rightly treated, is productive of ethical influence. Wherever the teacher succeeds in inspiring a love of truth, and honest effort in search for it, there character-building is going on.

A school should give the young something elevating to think about. It should awaken an altruistic sentiment, an interest in the general welfare apart from selfish considerations. Such a school will be a power for good in the community, altho no preaching is done, and the children never suspect that the teachers are trying to influence them. The power of such a school is felt thruout the whole neighborhood, because it sets in motion a general waking-up process, interesting the parents in the work of the school, furnishing topics for conversation at home, and generally arousing an interest in higher things.

In Buffalo we have been giving elementary instruction as to our city, state, and national governments, with a view to illustrating the moral principles which underlie good citizenship. Our object is not merely to give information, but to inculcate a high standard of public duty, the obligation of civic pride, a sense of the dangers arising from official selfishness and corruption, the need of placing public interest above private gain. We try to show the necessity for good government, that is, good management of a city in order that it may be clean, healthful, and beautiful, and to emphasize the wickedness of squandering the people's money in bad work. The necessity for taxes, that is, money to carry on the government, is easily shown in a city by referring to the need of public schools, of a fire department, and of police protection—things which the children are daily familiar with. In showing that the business of government requires a vast outlay of money for buildings, salaries, etc., which is collected from the people in taxes, the teacher is expected to bring out the fact that taxes are trust funds, and hence should be spent more carefully than private funds. The last year of the grammar-school course is reserved for the consideration of matters of importance to us as a city. Such questions as the common council, the powers of the mayor, the important appointments made by him, the city departments, the methods of carrying on public business, the difficulties in the way of good government in large cities, are presented and discussed.

It is the business of a school to furnish proper nourishment for the higher life and aspirations of the young. Appropriate literature is one of the best means of imparting right sentiments, and of leading the children to appreciate self-sacrificing deeds and noble thoughts. By bringing the better emotions into play the sympathies are aroused, the spiritual nature cultivated, and the foundation laid for right conduct.

The mind grows with what it feeds upon. We are dependent, not only upon our habits, upon the established trend of mental action produced by exercise and discipline, but also upon our acquired ideas, upon the thought materials stored up and organized in the mind. This material seems to possess a kind of vitality, an energy, an attractive or repulsive power. When ideals once gain a place in the mind they become active agents. They are not only the material with which the mind builds, they are a part of the mind itself.

The power to feel needs development as much as the power to know. The muscles of the body are developed by use. We make the mind strong and active by giving it exercise. So right feelings may be cultivated by calling them into exercise. If the nobler feelings are often appealed to, nobler feelings become easier, and, finally, habitual. If there is any truth in this philosophy, how important a teacher becomes as compared with the book he uses! If there is any truth in it, the age of the mere giver-out of information is going; the age of the inspirer is coming.

In an address delivered before this department three years ago, Supervisor Martin, of Boston, impressively showed that true moral teaching affects conduct indirectly by the general elevation of ideals; that it cannot be separated from the general discipline, instruction, and moral atmosphere of the school; that it must be the air which the young unconsciously breathe; that the stuff out of which the ideal is made is always character in the concrete, qualities incarnate — not precepts nor codes of ethics. He cited the case of Abraham Lincoln. While this great man lived and was carrying burdens such as no president ever carried before or since, men wondered how such a man could come from such a beginning. From a child he lived seemingly without one gleam of light or of fair surroundings. Such largeness of understanding, such loftiness of purpose, such singleness of aim, such grasp of great moral questions and questions of state — they seemed an effect without a cause; but when, after his death and under the influence of his growing fame, men began to scrutinize all the details of his early life and to find that his early associates had been, not merely the rough pioneers of the frontier settlements, but the men and women of the Bible, of *Pilgrim's Progress*, of Plutarch and Shakespeare, the mystery was in a large measure explained. He had been associated with the great characters of the world and had grown into their likeness.

Results such as I have described are not a matter of buildings, or systems, or text-books, or courses of study, but of teachers. It is essential that the individual teacher possess those elements of sincerity and earnestness which belong to high personal character. Some of the most effective functions of a teacher are really performed when he seems least to be teaching, because the power of his own personal character is constantly creating ideals in a way not laid down in any book. Every teacher moves thru the school, and before the pupils, the constant and visible embodiment of some type of manhood or womanhood. The pupils feel the contagion of a selfish or a generous spirit, of an honest or a tricky disposition, of a soul cast in a large or a little mold. It is not easy to explain the power of a born teacher to influence character, to create right motives. The truth is that selfishness begets selfishness, and noble-mindedness begets noble-mindedness. The child unconsciously takes the measure of his teacher. If, in reality, teachers are disinterested, if their chief aim is to be of service to those under their charge, and if they at the same time are really skillful, the children, tho they may never have reasoned it out, feel and recognize the influence of their personality. I have never known an instance where a class, as a whole, proved an exception to this rule.

The forming of right character, no less than the gaining of mental power, depends on the self-activity of the pupil. For this reason it is necessary to diminish, so far as possible, the element of coercion in discipline and substitute for it self-control. It is easier, of course, to govern by force. You can make a troublesome boy obey you by flogging him, but you cannot change his moral attitude on the general question of obligation and duty except by long-continued patience and persistent effort. The less we repress and tyrannize over children, the greater their tendency to assert their freedom, sometimes in disagreeable ways; but there is no other method of leading them into that self-government which is the end of education. We must give them some liberty in order that they may learn how to use liberty. Where there is no choice, no putting upon honor, no confidence shown, there can be no development of self-control.

I trust I shall not be considered unorthodox and reactionary if I express a fear that our new methods of education, as carried on by extremists, easily degenerate into a source of weakness because they fail to develop the power of self-reliance and individual initiative, which are more and more necessary elements of success in life. The complaint is sometimes made, and justly I think, that the tendency of the new methods is to give pupils a many-sided interest, but less vigor of mind and purpose than the old way, that the power of the teacher to impart knowledge and smooth out difficulties has been developed out of proportion to the pupil's power to acquire, and that the latter are less reliant and less prepared to attack and overcome difficulties than in former years. While we rightly try to make the schoolroom more homelike and attractive, we should at the same time remember that the world which the boy is to enter is no respecter of persons. While we attach less and less importance to examinations and aim to make the studies interesting and attractive, we must also remember that no education is complete that ignores the overcoming of difficulties as a factor in character-building. The human race has been developed by exertion. Except for care and struggle and pain man would never have risen above the intellectual and physical stature of Polynesian savages. As the chief argument against socialism is that nobody can explain what would spur on the lagging faculties of man when the incentive of want is taken away, so it would be difficult to show how the child is to be prepared for the struggle of life where he is allowed to proceed along the lines of least resistance, where there is no real downright hard work required, and where the boy thinks if he is not interested it is always the teacher's fault.

It is taken for granted in this country that children are to make their own way in the world, that they will have to look out for themselves, that they are not to depend on their parents, or on society, or on the government. If at school they form the habit of relying on the teacher, of having things made easy, the more likely they are to rely on help from others, from the community, or the state. Why is it that a boy who leaves school early and goes to work so often proves more than a match for the graduate? Because he is put on his own resources in circumstances where he has to sink or swim.

In an article written since the Spanish war, President Eliot insists that, when it comes to a pinch, the source of victory in modern warfare is in the personal initiative of each individual commander, private soldier, or sailor. "When all preparation is made," he says, "when all appliances have been perfected and brought together, in the particular thicket or mined strait in which the work of the moment is to be done, it is the perceptive power or moral resolution of the individual that commands success." In industries as in warfare the automaton counts for less and less, and the thinking, resourceful individual for more and more.

What has made the English-speaking peoples the leaders in the modern world, whether in planting colonies, or in maintaining self-government, or in extending commerce, or in storming forts, or in boarding ships? It is their common-sense, their readiness of combination, their realistic logic, their power of individual initiative. Surely this type of character is not developed where boys are coddled and entertained to such an extent that nothing is actually learned, and where the memory is so far underrated that even the learning of the multiplication table is considered to be unpedagogical.

I plead for schools where there is freedom enough in matters of conduct to develop the power of self-control, where the requirements are definite and exacting enough to develop the power of self-reliance and individual initiative, and where there is inspiration enough to implant high ideals and right ambitions to the end that the power gained in school may not be selfishly used.

I am aware that a school cannot, in this higher sense any more than in the lower sense, fully educate the young. It can only make the beginning, give the right bent, supply the means; the rest depends on the individual. The important question in regard to the products of our schools is not alone, What do they know? but, What do they love, and what do they hate? What is their attitude toward life? What is their notion of success? Is duty to them only a myth? If they think that success consists in wealth or position obtained at no matter what cost of character and honor, then their education has not done for them what it should. The bad, the unscrupulous, are never successful. When we speak of them as successful, when we envy them, we simply pass judgment on ourselves, and show that our own estimate of true character and worth needs toning up. The men who are the strength of society, who in times of stress and danger stand as beacon lights in the storm, are not men who simply look out for themselves, but men who are moved by some inner principle and are faithful to eternal verities. Whatever else we teach, let us inculcate this simple lesson: that no melancholy failure can possibly be in store for the youth who adheres to the simple purpose to be upright and useful; that plain living and high thinking is better than high living and no thinking; that self-denial is greater than self-indulgence; that selfishness cannot develop our highest capabilities, while a proper understanding of the higher meaning of life and its responsibilities has power to lift us above what is petty and trifling, make common life heroic, and give even to humble conditions something of greatness and joy.

DISCUSSION

William E. Hatch, superintendent of schools, New Bedford, Mass.—The subject that I was first asked to discuss and consented to speak upon was "The Tenure of Office of Superintendents and Teachers." I cannot refrain from saying that I regret the subject was changed.

It is said that "in Spain to this day they bar the windows and leave open the door." The thought sometimes comes to me whether we, as superintendents, do not avoid the discussion of direct issues for the safer and more pleasing task of considering generalities. It may be that this view is due to my narrowness of vision, but I have always felt that as a body we have been rather weak in offensive warfare. I trust I may be pardoned if I say a word on the original subject.

The question of the tenure of office of superintendents and teachers is one of great importance, and one that touches closely the future welfare of the schools. In Massachusetts, by the *Report of the Board of Education for 1897-98*, one-third of the cities and towns of the state had availed themselves of the provisions of the statute by which teachers may be elected to serve during the pleasure of the school committee. This is the latest report which deals with the subject. Since that report was made other cities and towns have adopted the measure, among them my own.

Now, either this is a movement in the right direction or it is not. I had hoped to hear the views of superintendents serving in various parts of the country on this important subject, and I am disappointed in not being able to do so.

"But to return to our muttons." We can but agree with the speaker in his main contentions. No one would argue that an encyclopædic man is a worthy product of the schools unless he can bring his knowledge to bear with force upon the problems of life that he is to meet. But I do believe that the field for improvement in fixing valuable knowledge in the minds of the pupils is yet wide. Full and exact knowledge is necessary if there is to be skill in application.

That the schools are accomplishing all that they might in moral training may well be questioned, but that they are doing their part and doing it well under present conditions can scarcely be gainsaid.

That the home is not doing all it ought in the development and the training of the children we all must feel who have thought much upon the subject. There is a tendency in parents, even among the best, to shift their responsibility upon others. This is as noticeable from the early age at which the wealthy pack off their boys to the boarding school as from the sad neglect to be observed in the homes of the poor. The spirit that causes the constant increase in urban population — the desire for companionship and the enjoyment of social pleasures, whether in the gilded ball-room on the one hand or the saloon and the cheap theater on the other — is characteristic of the age, and makes the problem of creating a strong and clean citizenship in the future a difficult one.

But withal the rich and the poor are the extremes, and there is a large and dominating middle class who are God-fearing and serious in their lives, whose children are worthy of their sires; and I am optimist enough to believe that America is in no danger from the degeneration of its youth as yet.

We are absorbing much of the very dregs of Europe, and in a generation or two making of their sons and daughters men and women, able, upright, and to be honored. In my travels thru Europe I have never seen children so happy, so strong, so interesting as our American boys and girls.

This is the children's age, at least in this country. It may be that we have swung to the extreme of the pendulum; that we are moved more by our sympathies in our treatment of children than by our judgment. But it seems to me that we must always remember that men and women are only boys and girls grown a little older. Children are influenced more by example than by precept, as are their elders. I think sometimes that we give them tithe of anise and cumin, and expect them to render tribute in the coin of the realm.

If, as the speaker has said, the true welfare of the country is in the keeping of the schools, we as guardians and directors of those schools have grave responsibilities. In organizing them, in planning the courses of study, in directing their administration, do we proceed from a thoro knowledge of the conditions of the community in which we serve? Do we know the various classes of children who are to be the victims of our planning? Do we look sufficiently into the future? If the welfare of the nation depends upon the public schools, we and the teachers are the conservators of that destiny.

And the teachers are the most important of all. If the schools are to send forth graduates healthy in mind and body, with convictions of right and wrong, and with courage to uphold the right, with ability to think and with courage to act, they must be taught by strong, honest, just, God-fearing men and women who are properly educated and trained for their vocation, who take a pride in it and realize its responsibilities. That these things may be true, the teaching force must become a more stable body than it is today. The occupation of school-teacher is still used too much as a stepping-stone to some profession, or a place to earn a living while waiting for a husband. Teaching must become a profession recognized as equal in dignity to the so-called liberal professions, if the work in them is to be of the quality desired.

The proportion of strong men in the schools must be larger than it is today. The percentage of woman teachers and weak men in them is by far too large.

That teaching may be raised to a profession the remuneration must be larger and the tenure of office secure during efficiency and good behavior. When these things are accomplished stronger persons will enter the vocation and will remain longer in it.

With skilled supervision securing good organization and good management, and with able teachers, those conditions that produce neatness, order, punctuality, industry, and systematic work will prevail naturally as a result.

Formal introduction in civics and ethics should form a part of the course of study in the schools from the lowest grades up. Children should be taught the reason for government and order in the social organism and learn to respect it. They should participate in government itself while in school, and learn by it self-control and how to direct others. In the great English schools this is a marked feature in their training that has borne good fruit. This does not mean a letting down of control or freedom from restraint.

I heartily agree with the speaker as to the value of acquaintance with good literature as a force in the development of the moral nature and its effects upon character. From his entrance into school to his finish the child should have presented to him the thoughts of the great writers both in prose and poetry. It is exceedingly important that this work should be begun when young, that his taste may be cultivated so well in the good that later he will have no desire for the trashy and bad.

I am no sharer in the belief that modern methods of education, which introduce a child to a great variety of interests in the early stages of his education and provide for him a wide field of electives in the secondary schools, necessarily tend to less vigor of thought and purpose than the old. They are not responsible for any apparent weakness. The cause must be sought for elsewhere. I believe this change is proving the salvation of many a boy and girl who otherwise would grow up useless members of the community. Today we live in a many-sided world as compared with fifty years ago, and the schools must be many-sided to meet the new conditions. The danger to the future of American citizenship lies not here. It lies rather in that spirit that makes pleasure and ease the chief consideration; the spirit that shirks honest, manly toil; the spirit that fears any privation if in the performance of duty.

It is the spirit that leads the well-to-do to neglect their civic duties; the spirit that causes them to remain at home and grumble at the corrupt administration of our cities instead of exerting themselves to change it. It leads to a molly-coddling of the children that gives them no duties to perform outside of school; that makes them think that they cannot go to school if it sprinkles, and demands the signal for no school to be struck frequently; the spirit that influences teachers to do work for their pupils that they should do themselves. Among the poor the same spirit leads them to neglect their children and their homes that they may seek such pleasures as are within their means and reach. Their children become enfeebled in mind and body thru neglect, and make the country hoodlum and the city criminal and tough. In one primary room in my own city one morning it was found that seven children had come to school without any nourishment; and there is equal neglect everywhere. The courts show us that juvenile crime is on the increase in every community, notwithstanding all that is done to guard against it.

Rudyard Kipling has stirred England to its depths with his "Islanders." The London *Globe*, in a vigorous article recently published, deplores the molly-coddling that has begun to invade the great historic public schools of England. It says: "Boys' characters are built up at school; and, if their slackness and softness is the rule, it is little wonder that so many fail when they have to face the stern realities of life."

We think that we are doing much for the children and youth of our land, but there is scarcely a community that is doing what it ought. The people have thrown the responsibility of the training and education of the children upon the schools. They do not realize it, but they have, and they must be made to see and supply the means that the schools may meet the responsibility.

More must be done by the schools for the health and bodily development of the children than they are doing today. The lack of proper physical training is one of the most serious defects in the public schools of this country.

The next ten years will produce as marked an advance in the schools in this respect as the past ten have produced in manual training.

We have the best material in the world from which to create a future citizenship worthy the nation and the age, the American boys and girls. Coming to join them every year are thousands ignorant of the American language and life. To assimilate these latter and make of all American citizens possessed of healthy bodies and trained minds, honest, law-abiding, and self-respecting citizens, is a task that demands high talent in the schools and a co-operation of all the social forces.

This country is fortunate in possessing great agricultural regions. Every citizen should thank God for the boundless prairies of the great West. When the urban population of our country exceeds that of the rural population, the problem of creating and maintaining a citizenship equal to that of *today even* will be a task immeasurably greater than at present.

H. O. R. SIEFERT, superintendent of schools, Milwaukee, Wis.—Of the various means which have been mentioned as being of importance in forming the character of the young American there is one which seems to deserve special attention—appropriate literature.

In order to waste no time we will accept the conventional definition of the dictionary, which says: "Literature embraces all compositions resulting from observation, thought, or fancy." And by *appropriate* literature we mean that which is fit to be read by a child, and in which he can be interested. This would include true stories of animals, fables (with the moral unexpressed), and fairy tales for the youngest children; legends, myths, biographies, and historical tales for the middle grades; masterpieces of literature for the upper grades; poetry for all grades.

While the literary treasures of many peoples will furnish material for our purpose, the child must, above all, be made familiar with the literature of his own country. The great deeds of the warriors, the sublime wisdom of the statesmen, the lofty thoughts of the poets of other lands, doubtless have a wholesome influence in forming the views and sentiments of the child, but it is primarily the contemplation of the virtues and deeds of his own countrymen that will make the most lasting impression upon the plastic mind; not so much because the heroes of his own country surpass all others in the greatness of their achievements, but because the mentioning of their very names carries with it that feeling of affinity which engenders a degree of sympathy not likely to assert itself under other conditions. It makes quite a difference whether the author of a certain beautiful poem once lived in England or in some other country, or whether you can tell a child that such an author was born in Boston or New York, and that he lies buried in a place not far from the child's home, where some day he may go, and, as a tribute of gratitude and veneration, lay a wreath of flowers on the resting-place of a great compatriot.

There was a time when the critics outside of this country considered Edgar Allan

Poe about the only American writer of real genius. But it is no longer denied that there is a galaxy of American authors scarcely inferior to the best of other lands.

One particular trait not often found in foreign authors seems to be common to our own — making their productions pre-eminently suitable for children's reading. It is the purity of sentiment. The erotic element which in the works of many of the world's greatest authors dominates to such an extent as to render them unfit in their original form to be read by the young, or — I say it boldly — by any man, is, in its objectionable aspect, almost entirely absent in the works of our best writers, and in its place we find filial affection, philanthropy, and love of country. For these reasons, and others which might be advanced, I hold that in our common schools the children should be made acquainted with the best American authors thru those of their works which are best suited for that purpose. The following may serve as a suggestive list: Benjamin Franklin, *Autobiography;* Irving, *Sketch Book, History of New York, Alhambra;* Cooper, "Leather-Stocking Tales," *The Spy, The Pilot;* Bryant, *Lines to a Waterfowl, The Yellow Violet,* and other poems; Drake, *The American Flag;* Hawthorne, *Wonder Book, Tanglewood Tales;* Longfellow, *Evangeline, Hiawatha,* and a number of the shorter poems; Harriet Beecher Stowe, *Uncle Tom's Cabin;* Whittier, *The Barefoot Boy, Barbara Frietchie,* and other poems; Poe, *The Raven;* Holmes, *Old Ironsides;* Lowell, *The Fountain;* Parkman, *Histories;* poems by the Cary Sisters, Thomas Baily Aldrich, and others too numerous to mention.

Of the world's great books which every child should read I will mention only Plutarch's *Lives, The Pilgrim's Progress, Robinson Crusoe,* and *Ivanhoe.* In the regular school reading-books there might be, without offense to anybody, a selection of the parables from the New Testament, the Sermon on the Mount, and a few of the psalms of David, such as the twenty-third, for example.

The question may be asked, "How can all these books and selections be read in school?" It is not intended that this should be done. Some of them can be read during the time that is set aside for supplementary reading, but the majority must be read by the children at home. It is the teacher's function to get the child interested in a book by reading, or, still better, relating, portions of it at some suitable time. This may be done in connection with the various studies of the curriculum, thereby making the studies much more interesting. For example, it is much to be desired that the study of geography should be correlated with history. I remember from my own school days that I cared little about the West Indies until I read the story of Columbus. Mexico and Peru, with their quaint institutions, became wonderlands to me through Cortes and Pizarro.

When a young child I was made to study zoölogy from a regular text-book. The lessons were dry and tedious, and I took no interest in my work. The colored pictures in the book were the only things I cared about. One day I found an old book in which the animals were made to describe themselves and tell their own stories of life and peculiarities. My interest was at once aroused, and in a few days I had not only read the whole book, but I had learned more about animals than I should otherwise have learned in a year. The right kind of literature had animated the dry bones of a technical study.

Poetry has a wonderful influence on the receptive and unpolluted mind of the child, and it should be made use of more than it is. The very young child will enjoy the nursery rhyme for its jingle and innocent fun. Gradually and unconsciously, as he grows older, he will learn to love the music of the meter, and finally he will feel the whole beauty of the thought clothed in regular form. Poetry should be read and recited to the children and by the children, and, if suited for the purpose, it should be sung.

To sum up: Keep the children away from the harmful influence of bad literature; teach them to appreciate and love that which is pure and patriotic and elevating; be not merely their instructors and governors, but their monitors and pastors, and they will grow up the noble sons and daughters of a noble country, and bless the teachers who led them in the ways of righteousness.

JOHN MACDONALD, editor *Western School Journal*, Topeka, Kan.— I do not agree with Superintendent Emerson when he says our schools are deteriorating. Our schools are better than they were years ago; they are better today than they were yesterday; they will be better tomorrow than they are today. Let us pray for Brother Emerson.

SUPERINTENDENT EMERSON (in closing).— Superintendent Hatch is not as much of a martyr as he represented himself to be. While it is true that the general subject was changed, it is also true that he was notified of the change at least a month before this meeting. I feel warranted in saying that very few, if any, of those who are on the program began the preparation of their papers more than a month before the meeting. In reply to Mr. MacDonald, I simply wish to reaffirm the statements I made in my paper, contrasting the present and past conditions of the public-school work done in this country.

THE IDEAL NORMAL SCHOOL

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I foresee that the term "typical normal school," or "the normal school of the future," will best indicate my treatment of the subject which has been assigned me. I do not propose to set up a normal school in Utopia, certainly not within the space of thirty minutes. The school that is to be is the school that is, of course with modifications. Human institutions acquire a momentum which carries them forward, oftentimes without regard to rhyme or reason. Institutions also obey the law of growth. They emerge from one stage of growth and gradually pass into a new and more advanced stage. Humanity as a whole is to have a better future, but this better future is to be an evolution out of a relatively good past.[1] A sudden break with tradition is seldom justifiable. We may be quite sure that any policy that has had the long sanction of the wise and the good has a large measure of truth in it. An idiot or a madman may destroy, but only wisdom and prudence can build. What we need, to use Mr. Spencer's happy phrase, is "to take stock of our progress," to try our work by some rational standard, and to introduce needed revisions and amendments.

In order to simplify this discussion, I shall limit my treatment to one type of the normal school, to what may be called the prevalent type, namely, the state normal school. It is no part of my purpose to discuss either the schools which lie below this plane or those which lie above it.

We sometimes make substantial progress by judicious and prudent retreat. In our haste to grasp the new we sometimes lose our hold on the old and the true. I have been much struck with this sentence from John Morley's account of *Diderot and the Encyclopædists:* "Alas," he says, "it is one of the discouragements of the student of history that he often finds highly civilized remarks made one or two or twenty centuries ago which are just as useful and just as little heeded now as they were when they were made."[2] During the period from 1839 to the present time the type of the American normal school has radically changed, or, rather, there has been a change in the center of interest. Possibly this displacement has not been wise. Possibly it may be prudent to return to an abandoned ideal.

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[1] "The thing that hath been, it is that which shall be; and that which is done is that which shall be done."

The law of a piece of mechanism is the product which is to issue from it. If the product must be modified, some special modification must be introduced into the mechanism. The governing law of a school is a clear conception of what its pupils should be. The normal school stands in this case. By observation and prophecy we determine what a teacher should be, and then we organize the forces necessary for realizing this conception. It is simply a case of adapting means to ends. Obviously, in the minds of those who mold public opinion there has been a change in the conception of what a teacher should be, and as a result there has been a corresponding change in the policy of our normal schools. If we can agree as to the required attainments of the teacher, we shall hardly disagree as to the means for producing these attainments. But there is room for sane and honest disagreement. Just now we are passing thru the period of discussion in which disagreements and differences are inevitable and pardonable.

I shall not waste time by dwelling on details. In such discussions we should move only along main lines, not losing ourselves in by-ways. If we find our way along the highways of our science, we shall economize both effort and speed.

It is doing but deserved justice to our normal schools to state that their fortunes are being directed by the best educational talent of the day, by men who are alive to the spirit of the age, and who have the gift of serious and solid thinking. In no other department of educational enterprise is there a keener search for truth or a more determined effort in the line of substantial improvement.

Following the line of procedure already indicated, I shall venture to state some opinions as to the qualifications and attainments needed by the ideal teacher, and shall suggest what seems to me the rational means of securing these endowments. I prefer to speak in the potential, or in the interrogative, mode, but if I sometimes resort to the indicative, it is not that I would dogmatize, but that I may give expression to an honest opinion. To discuss this large subject within the prescribed limit, my treatment must needs be fragmentary and incomplete.

The capital fact, the one that antedates all others in importance, is this: The teacher should be an artist rather than artisan. An instance of what I have called the displacement of interest is the movement from scholarship to technique. Is it not a false analogy which likens the art of teaching, which deals with spirit, to the mechanic arts, which deal with matter? "Training" is a term of sinister import, as it seems to put the emphasis on sleight of hand and to suggest limited acquirements and endowments. It is freely admitted that in school administration there must be some degree of mechanism, but it is a gross error to regard the school simply as a piece of cunning machinery. If it is a machine at all, it is a machine animated, inspired, and directed by spirit, the spirit of him or her who teaches. Is it not absurd to think that teachers are to learn their art by methods analogous to those that prevail in mills and shops? The shop deals with the matter that is uniform in quality, and it aims at products that are uniform in style and finish. The school, on the contrary, deals with impalpable spirit, multiform in its manifestations, and necessarily and properly multiform and variable in its transformations. Is there a truer conception of teaching than that it is a process of induction, a process by which plastic spirit is molded and fashioned by a master-spirit richly endowed with the finer qualities of mind and heart? In the last analysis it is not the linguist, or the scientist, or the specialist of any sort that educates, but the man or the woman inspired by scholarship and culture. In illustration of what I mean, I will repeat for the hundredth time the saying, attributed to President Garfield, that the real essentials of a college are an impressible boy on one end of a bench and a Mark Hopkins on the other. It is the net personality of the teacher that educates, and schools that profess to educate teachers should preserve this net personality rather than allow it to be broken up into *disjecta membra*. Mere specialists are a menace to a school in which teachers are to be educated for high and efficient service. A specialist may instruct, but he cannot educate, as education implies what is wholesome, that is, wholeness. If the specialist must needs be, his destructive work must be offset by culture subjects, such as literature and history, which appeal to the whole man, and tend to preserve his essential integrity. Ultimate analysis destroys a work of art as an educating instrument. It is a desecration to dissect a piece of literary art by grammatical and linguistic analysis. I shall not be misunderstood when I say that the scientific treatment of a subject, that is, its analysis into its molecules, and then the inspection and evaluation of its fragments, destroys it for purposes of education proper. This so-called scientific process which is now in vogue is very like the application of a microscope to a painting. It resolves a masterpiece into shreds of canvas and patches of paint. All this amounts to saying that studies of the culture type should have a large place in a school whose aim is the education of teachers.

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[2] *Diderot*, p. 185.

A normal school should teach chemistry, but it is not its function to educate chemists; it should also teach language, but it should not aim to produce linguists, etymologists, or philologists. The unwisdom of this specializing process is seen when each of a half dozen instructors attempts to make a specialist out of the same pupil.

More than once I have tried to reconcile myself to the contention, sometimes made, that geometry in a high school and geometry in a normal school should be taught by methods essentially different. This contention is made, doubtless, partly to differentiate the normal school from the high school, and partly to conform to the dictum of Mr. Spencer that the method of instruction should conform to the method of discovery. Of one thing I think there can be no doubt: a normal school should teach a given subject, as geometry, just as its students should teach it when they in turn become teachers. It is not true that teachers as a class are to be investigators, discoverers, or specialists, but that their function in the main is that of disseminating and distributing. The vice of vivisection lies in the assumption that a long-discovered fact is to be rediscovered for the ten-thousandth time. Perhaps in the distant future we may have normal schools like the famous École Normale Supérieure of Paris, whose function is the education and training of specialists; but we have not yet reached this stage, and the becoming function of our state normal schools is to prepare young men and women for diffusing capitalized knowledge; not for creating a new chemistry, but for teaching the chemistry already created. In saying this I am mindful of the fact that the communication of knowledge is only one aim of the school; but it is one of its principal aims.

In his terse way Alexander Bain declares that one of the needful conditions for learning is the "quiescence of the emotions." A normal school should live in a state of peace. It should ever be in a condition of stable equilibrium. Its function should not be the discovery or even the rediscovery of educational truth. It should have a settled policy and a prevalent doctrine, but it should not be militant or revolutionary. It should not lend itself to doubtful disputations. It should be religious in tone and spirit, but it should not teach a controversial theology. So it should be inspired and guided by a real tho unannounced educational creed; but it should be sheltered from the warring factions of educational doctrinaires. Its purpose is not to recruit the ranks of educational theorists and reformers, or even to recast our educational philosophy. *Per se* these are legitimate functions, but they lie far above the plane of the normal school, and far beyond the ability of the normal-school student. All this said in the way of reasonable limitation.

In the future toward which the term "ideal" points, our educational philosophers will continue to speak from their high vantage ground, but between them and us who move on a lower plain there should be authorized interpreters who can bring these larger utterances within the comprehension of the ordinary mind. It must have occurred to many who have attempted to comprehend the new pedagogy that a new philosophical language is in progress of formation, which is almost utterly unintelligible to the lay reader or student.[1] There is some reason to fear that this new symbolism may invade the normal schools to distress and bewilder their students, and that they will finally issue from their "laboratories" to inflict the new speech on helpless children. In our profession we need another Rousseau to teach the virtue of simplicity and to preach a return to the use of simple, frugal, transparent English. What is to be feared is the downward diffusion of jargon. What is to be desired is the prevalence, in school and out of school, of the beautiful and wholesome English of the New Testament, of the English of De Foe, of Addison, and of Bunyan. In the way of philosophy it should be remembered that the colossal common sense of John Locke expressed itself in terms easily intelligible by the ordinary reader and thinker; it did not attempt to clothe obscure conceptions in obscure symbols. As the normal schools are now dwelling so much on technique, it is to be feared that the new jargon may become sporadic. It should be one of the professional missions of the normal school to insist on the use, in speaking and in writing, of clear idiomatic English. This problem is now complicated by the feeling, far too common, that obscure utterance bespeaks profundity of thought. Philosophical language, as used by some of our writers, easily shades off into congenial obscurity; but it should be regarded as a mental weakness to make a thought vague by clothing it in unintelligible terms.[2]

All instruction should aim at what Macaulay calls "intellectual emancipation," that is, the creation within the pupil of the ability to deal with the problems of life, general and professional, at first hand. In other words, men should be taught to do their own thinking and to come to their own conclusions on all matters coming within their proper province. A Greek proverb says that a mob has no brains, and it is not a bad description of the aim of education to say that it should supply men and women with individual brains. The routine work of the school encourages routine thinking, and this in turn produces teaching that is dreary and wooden. In Carlyle's phrase a teacher should be a live coal rather than a dead cinder, and this simile points to versatility, variety, and originality; and so far as instruction can produce these endowments, they flow from studies and disciplines of the liberal type. I fear it must be said of many normal schools that they do not produce liberal scholarship and the ability to do independent thinking. There is a necessary incompatibility between technique and liberal training; and so long as the stress is placed on empirical method, there is no hope that the prevailing spirit of the school will be liberal and scholarly.

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[1] "Will is actualized in an object which is itself will, and this is a will which wills will. Such an object which is existent in the world as will, whose end and purpose is to secure will, is an institution."

[2] "There is a well-recognized literary disease which may be called logomania, and which subjects its victims to the irrational influence of words. The intoxication at times becomes complete, and the victim reels under the dominance of the poison, though maintaining a semblance of coherence and occasionally of wisdom."—*The Dial.*

A liberal art is best learned thru the science which underlies it. The mastery of a prolific principle or doctrine is a rational art by implication. The most that should be required of the methods by which a given subject is taught is that they should have a typical resemblance. They should find their unity in some principle which implicitly contains them. Methods, to be wholesome and inspiring, should reflect the personality of the teacher who employs them, just as a dress should reflect the personality of the wearer. Dull uniformity has become a school disease, and its only cure is to be found in that broad intelligence which can interpret a general principle or doctrine. Stated in the order of their importance, the three aims of the normal school will stand as follows: scholarship, science or doctrine, method.

It is a widely prevalent error that psychology, as a whole, is convertible into an art — the art of teaching. It would be almost as sane to say that astronomy is convertible into an art — that we can draw utilities from the stars. I suppose the truth is that only the more obvious and simple principles of psychology can serve as a basis for the educating art. Teachers who are overzealous in the interests of the new education seem to think that the road to success lies in a study of the occult and abstruse psychology now in vogue. I have in mind the principal of a little school who has placed his teachers on a course of study in the "application of psychology to education." It is not difficult to see the result of this dreadful infliction: a groping in darkness, a bewilderment of spirit, a disgust with the higher pedagogy. It is pathetic to see good intent so utterly misplaced. The psychology of the normal school should be simple, comprehensible, and descriptive of the more obvious facts of the intellectual life. Its relation to psychology, as a whole, is about the same as the relation of hygiene to the general science of physiology. In fact, there are two psychologies, a simple, plain, commonsense treatment for the use of the lay members of our profession, and an abstruse, transcendental science for the use of our discoverers and expositors. The first is a psychology in action, written from the standpoint of the mind as it is engaged in the act of learning. The other is a purely abstract science, lifeless and inert, as remote from human use as the "*méchanique céleste.*" The psychology taught in the normal school should be the science which will give its students practical guidance in the practice of their art.[1]

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[1] Since writing the above paragraph my eye has fallen on the following lines from the pen of Dr. Münsterberg: "I do not believe in it [the new psychology], and that overwhelming movement toward psychology among the elementary teachers seems to me a high tide of confusion and dilettantism, and the only thing about which I am doubtful is which of the two necessary results is the worse, the results with the superficial teachers or the results with the earnest ones. The superficial teachers torture the poor children with experiments, and deceive themselves with empty phrases about reaction times and psycho-physic laws. The earnest and sincere teachers feel very soon that all those woodcuts of pyramidal ganglion cells and pendulum

It should be remembered that our main source of professional improvement is the study and interpretation of our classical writers on education, such writers as Plato, Aristotle, Quintilian, Plutarch, Comenius, Montaigne, Rabelais, Rousseau, Kant, Pestalozzi, Richter, Rosenkranz, Ascham, Milton, Locke, Spencer, Bain, Horace Mann. These may all be found in intelligible English, and it is as reasonable to expect that teachers should be familiar with these books as that physicians, lawyers, and clergymen should be familiar with the great writers in their respective professions. So far as the higher interests of our profession are concerned, would it not be a clear and wholesome gain to devote more time to the study and interpretation of our classical literature, and, if necessary, a little less time to practice teaching and the discussion of methods?[1]

Both on its own account, and as an offset to the scientific trend that seems to be prevailing in our education, the art of literary interpretation should be urged on all who aspire to do educational work of a noble type. Of course, the sciences which deal with matter should have a place, and an important place, in every scheme of instruction; but they should not overshadow the sciences which deal with spirit. Not only the art of reading good books, but, even more, the appreciation of good books, should hold a high place in the education of teachers. To construct and furnish natural history cabinets is a pleasing and educative occupation, but to construct and furnish a good library is an achievement of transcendent value. To read and interpret the *Republic* is to join company with Plato as he moves on his high intellectual plane. To enter into hearty communion with the poet is to experience an upward transformation of spirit. There is a vital relationship between literature and life, the life of the soul. The purpose of the literary art, so far as it concerns the students in our normal schools, is not criticism, but appreciation. It is a sorry business to see striplings sitting in judgment on the masters of the literary art. Their becoming and ennobling attitude is that of appreciation and enjoyment.

In one of the picturesque cities of New England I once discovered a normal school sheltered in an art gallery. Nothing could be more becoming or more wholesome. To be in daily communion with the beautiful and the graceful in art is to inherit the endowments necessary for interpreting the beautiful world which is our habitation. Such a

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chronoscopes do not help them a bit, and they then become disappointed, lose their confidence in their own ability, and try and try again with the ganglion cells till they are tired, and till their natural teachers' instincts are scattered and ruined. Call me conservative, call me reactionary, call me ignorant, but I adhere to my belief that *the individual teacher, for his teaching methods, does not need any scientific psychology, and that tact and sympathy and interest are more important for him than all the twenty-seven psychological laboratories of this country.*"

[1] "Printing ink," says Richter, "now is like sympathetic ink, it becomes as quickly invisible as visible; wherefore it is good to repeat old thoughts in the newest books, because the old works in which they stand are not read."

culture may not be needed for teaching the multiplication table or lists of names and dates in history, but it is needful for producing that spiritual transformation which is the secret of education proper. There is a good reason for furnishing a normal school with maps and globes and with apparatus, physical and chemical, but there is even a better reason for furnishing it with engravings, paintings, and statuary.

We must transport into the school of the future many of the good things to be found in the school of the present. In the way of science, it is hazardous to declare that certain things cannot be; yet there are some things so good that it is hard to see how they can be mended. These reflections occur to me as I recall incidents connected with visits to several of the larger normal schools of the South. It was at Rock Hill that I observed what seemed to me then an ideal system of school hygiene. The buildings, tho large, were scrupulously neat and clean; the ventilation of schoolrooms and dormitories was thoro and effective; there was a gymnasium with baths attached; a bowling alley and a laundry; by means of a covered walk the dormitories were connected with an infirmary; at the head of this infirmary was a trained nurse; there was a well-appointed kitchen in which the skillful cook prepared food for the sick; and over all there was a resident physician.

Incidentally I have spoken of liberal scholarship as one of the foremost aims of normal-school instruction, and since we are dealing somewhat in ideals, I beg leave to present the lineaments of the ideal scholar as I find them set forth in a very ancient book:

> A lover, not of a part of wisdom, but of the whole; who has a taste for every sort of knowledge, and is curious to learn and is never satisfied; who has magnificence of mind and is the spectator of all time and all existence; who is harmoniously constituted; of a well-proportioned and gracious mind; whose own nature will move spontaneously toward the true being of every thing; who has a good memory and is quick to learn; noble, gracious, the friend of truth, justice, courage, temperance.[1]

I may now fitly close this list of suggestions by quoting another ancient ideal which twenty-three centuries have not overtaken:

> There remains the minister of the education of youth. . . . . He who is elected, and he who is the elector, should consider that, of all the great offices of state, this is the greatest; for the first shoot of any plant rightly tending to the perfection of its own nature has the greatest effect on its maturity; and this is not only true of plants, but of animals wild and tame, and also of men. Man, as we say, is a tame or civilized animal; nevertheless, he requires proper instruction and a fortunate nature, and then, of all animals, he becomes the most divine and most civilized; but if he be insufficiently or ill educated, he is the most savage of earthly creatures. Wherefore the legislator ought not to allow the education of children to become a secondary or accidental matter. In the first place, he who would be rightly provident about them should begin by taking care that he is elected who, of all the citizens, is in every respect the best; him they shall do their best to appoint as guardian and superintendent. To this end all the magistrates, with the exception of the council and the prytanes, shall go to the temple of Apollo, and elect by ballot him of the guardians of the law whom they severally think will be the best

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[1] *Republic, passim*, 475–87.

superintendent of education. And he who has the greatest number of votes, after he has undergone a scrutiny at the hands of all the magistrates who have been his electors, with the exception of the guardians of the law, shall hold office for five years; and in the sixth year let another be chosen in like manner to fill his office.[1]

DISCUSSION

Frank L. Jones, state superintendent of public instruction of Indiana.—I am sure that we find ourselves so much in accord with the fundamental statements of the paper that it is hardly necessary to restate them even for the sake of emphasis. That "the teacher should be an artist rather than an artisan;" that "mere specialists are a menace to a school in which teachers are to be educated for high and efficient service;" that "the normal should prepare young men and women for diffusing capitalized knowledge, not for creating a new knowledge;" that there should be no hindrances to educational progress due to the haziness in which it is often shrouded, as seen particularly in the indefiniteness of its purposes and the generalities of its statement; that the education should be liberal, tho somewhat limited; that "the psychology of the normal school should be simple, comprehensive, and descriptive of the more obvious facts of life;" and, above all, "that it should be democratic," are so obvious that they might safely be stated as educational principles. There remains one point, however, the first one raised by the reader of the paper, which should be enlarged upon in the discussion—it is this: "The governing law of a school is a clear conception of what its pupils should be." In this statement of the law it is wise to lay emphasis upon the word *pupils*. It would certainly be false doctrine to assume that the law of the school is a clear conception of what the *pupil* should be—the former enables us to evolve the ideal group; the latter, the individual. The classification of the school, its administration, its recitations, its exercises, and its study are based almost wholly upon the notion that the group is fundamental, each pupil relating himself to the whole, and estimating his standing in it by his variance from the general standards of it.

The ideal normal school, therefore, must surely take first account of the possibilities of the entire group of teachers and place its emphasis upon a standard of efficiency which will enable that group as such to maintain itself upon as high professional basis as all of the attending conditions will admit of. It would be a waste of time to elaborate a system designed to make each teacher a master, or indeed to make each teacher a graduate from a course of study covering three or four years of academic and professional work subsequent to his completion of either the common- or high-school courses. The promulgation of such a system as this thru the statutes of a state would make necessary the withdrawal of 85 per cent. of its teaching corps, and would leave the schools in a condition of chaos.

A study of the qualifications and training of teachers in the ten states, Indiana, Kansas, Michigan, Missouri, New York, Ohio, Pennsylvania, Wisconsin, Illinois, and Iowa (from 600 to 13,000 reported in each state), shows the following:

1. The number of college or university graduates in the profession of teaching varies from the highest, 6.4 per cent. in one state, to the lowest, 1.1 per cent. in another.

2. The number of normal-school graduates, including all grades of these schools and all courses from one to four years, varies from the highest, 53.1 per cent. in one state, to the lowest, 2.8 per cent. in another. The large number of normal-school graduates in the first is due to a low standard of entrance requirements and a short course of study.

3. The number of teachers who have had no training above the high school varies from the highest, 68 per cent. in one state, to the lowest, 30.1 per cent. in another.

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[1] *Laws*, 765, 766.

4. The number of teachers who have had no training above the common branches in the common schools varies from the highest, 45 per cent. in one state, to the lowest, 13.3 per cent. in another.

5. The number of teachers who are teaching this year without previous experience varies from the highest, 23.9 per cent. in one state, to the lowest, 5.5 per cent. in another.

6. In a total of 20,662 teachers studied in ten states, including all of the teachers in each county reporting, 12.4 per cent. are teaching without previous experience, 23.7 per cent. are teaching without qualifications above a common-school training in the common branches, 40.8 are teaching without qualifications above a high-school education, and 7.3 per cent. have had less than one year in normal schools.

A condition which admits of the return of more than one-half of the graduates of our public schools, without further training, to become teachers of their former associates on the playground and in the class-room, possessing no insight beyond the educational standards required of their pupils for graduation, makes much progress impossible, and places before the normal school a practical problem.

In view of this low standard of teaching ability and experience it is at once apparent that two very different views of the essentials of an ideal normal school may be had, each meritorious in certain large aspects. The one looks toward the maintenance of a high standard of entrance requirements, four or more years of careful study in residence, standard courses in the theory and practice of teaching, and one or more years of training-school experience under the supervision of critic-teachers; the other looks toward a short course, tho thoro and efficient, following at once the common- and high-school courses, with a view of striking contact with the great body of teachers, tho for a brief period. Who can say which of these views, consciously followed thru a period of years, would strengthen more the teaching *group?* If the first be followed, we keep before the teacher an ideal difficult of attainment, great individual expense, and the expenditure of much time in study. Under present standards of promotion and compensation this arrangement presents difficulties to the average teacher impossible for him to overcome; he sees the immense labor, the large outlay of money, the very inadequate compensation at the other end of the course, and as a consequence decides to obtain a license at once, and by fairly acceptable teaching, local, political, or social influences, or otherwise, keep himself in the schools, tho wholly unequipped, just as long as possible, rather than face the normal course and professional training on so large a scale. The larger course has its chief virtues in its ability to set high standards, to educate leaders, and to equip supervisors and superintendents. The sprinkling of this leaven thruout a commonwealth exerts a powerful influence for good and disseminates lofty ideals and standards, but fails in large measure to elevate sufficiently the whole teaching group, as is attested by the fact that only 8.1 per cent. of the teaching corps of eight states can lay claim to normal graduation, even reckoning all grades of those schools.

It may seem educational heresy to advocate lower standards in normal courses, but only in such, it seems to me, can we remove the barriers to an early uplift of the teaching group. The ideal normal school should first of all seek to come into contact with as many of the state's teachers as possible. To do this, would it not be wise to maintain courses of study and practice that will not present impossible barriers to the majority of the group? Let us equip our normal schools with brief tho vigorous courses of study and practice. Issue graduate diplomas at the end of two years of resident study; limit the courses to the common branches — literature, music, general history, the theory and practice of teaching, and composition — and the teaching by the graduates from such a course to the common schools; make the diploma a state license valid to teach in only the common schools for a period of years, conditioning its renewal as a license after that period upon a high degree of success in teaching and a fair degree of progress; in this brief course give to each student-teacher ample opportunity to do practice-teaching or to observe the daily work of a skilled teacher, not indeed to mimic, but to catch inspiration

—the observation of how a master works has its compensation not so much in the ability to go elsewhere and do likewise as in the consciousness of the attitude, self-mastery, complacency, tact, skill, and ability of the master by which such work is made possible. The value of such observation is that it reflects the master in the doing, and thus enables each observer to become a master.

I am convinced, however, that the practice and observation in training schools as now established, where the whole organization is based upon the social and educational conditions in cities, have in them very little help for the teacher who gives his time to the rural and village schools. It should be required by the state that model rural schools, accessible to normal-school students, be maintained for purposes of observation in connection with and under the direction of all normal schools.

In addition to this course, continuing thru two years, there should be one extending thru four years, encompassing all in the briefer, and adding the necessary academic and professional courses to equip teachers for high-school instruction, principalships, and superintendencies. The completion of such a course should entitle the holder to a life state license to teach in all grades of schools.

It seems to me that an arrangement as here suggested would hold as many students in the longer courses as we have now, and in addition would encourage hundreds of teachers to take at least the briefer course, with a possibility of creating such a good taste for better training that many would continue thruout the entire course.

RICHARD G. BOONE, superintendent of schools, Cincinnati, O.—I am sure I voice the common sentiment of many of my hearers in saying it has given us genuine pleasure to hear again our friend Dr. Payne. His theme is one that has been familiar to him for years. His phrasing of it is all the better for the changing of a word. The maturest, best-considered current notion of the normal-school type has an abiding interest for those who employ or supervise teachers. What are the really vital qualities in the teacher which the normal school must stimulate and cultivate?

I am not sure that limiting the discussion to *state* normal schools is important. Indeed, it is not quite apparent that the leader has observed the limit. Every qualification mentioned as needed by the ideal teacher would be valid for one trained in a city or private or secondary normal school, not less than in the elementary normal schools supported by the state. Nevertheless, the discussion is made simpler by thinking of the preparation of teachers for elementary schools chiefly.

I think I should agree with the general statement that the great change in the normal-school ideal in a generation has been in working away from wholeness of culture toward specific training. The movement has often led to short courses and pedagogical tables and formal steps and syllabi and manuals and plan books and device inventories. Graduates have carried away with them the coat-of-arms of their school. They have mastered a way of doing things, and arguments to justify the way. They have been trained, but not educated. They are artisans, tho *skilled* withal. Some things may be done expertly well; but there is often lacking a breadth of view because there there is no breadth of foundation. Scholarship is wanting, and so the rich character results of scholarship. Paucity and provincialism of experience easily pauperize character. To have thought little and narrowly and chiefly of one's own time and region is not conducive to a deep personality nor to the uplift of one's teaching. In the words of the speaker, "it is the net personality of the teacher that educates," not his learning, not his discoveries, not his scientific or linguistic attainments. He reveals his teaching power rather in his large heart, his good sense, his receptive, alert mind, a resourceful interest in his charge, and a masterful grip on the much or little learning he has. Next to being born with these qualities, a course in those subjects that converge upon human interests and fix the human relations, especially upon the planes of the fine and industrial arts, conduct, personal and social responsibility and privilege, man and his institutions, and the conditions of race and individual improvement, will probably do most for the intending teacher. There is wanting then "not so much scientific analysis as scholarly interpretation" in the fitting of teachers; a fine and liberal appreciation of what is best and most inspiring and wholesome among the incentives to right living and effective doing.

It may well be questioned, however, whether a familiar and sympathetic acquaintance with nature, a knowledge of and interest in growing things as they grow, and forces at work in the material world, will not open doors for as effective teaching as any or all studies of the "culture type." Among these phenomena child experiences begin; among them are the occasions for sense-training and manifold interests and mental alertness. If these qualities of mind and heart are to be secured to the child, they must have been mastered by the teacher. The laboratory and the field will yield some lessons that cannot be derived from books; lessons that are vital in the education of the young. I have great faith in the scientific mind as a factor in the training of teachers.

But here again, as mentioned in a previous paragraph, what is needed perhaps in the preparation of the teacher is interpretation, sympathetic, intelligent appreciation, not criticism and an analytic system; clear insights, a sane and balanced joy in watching and directing the processes of growth, a familiar knowledge of how the mind behaves in learning, and the tools it best uses.

I have been quite as much interested, Mr. President and fellow-teachers, in noting what the leader omitted from his discussion as in what he said. No mention was made of conditions of entrance upon the formal preparation, of length of course, of cadet or practice schools, of supplementary and optional courses for teachers of different grades of schools, or of method, except to class it under general scholarship and self-initiative. I fully agree with the paper as to the order of the three aims of the normal school, viz., scholarship, science or doctrine, and method, but believe that more importance should be attached to the mental processes involved in learning and a sound method of procedure as conditioned by that process. The main source of improvement for teachers may be "the study and interpretation of our classical writers on education," from Plato to Horace Mann; but, if so, the improvement will probably be because the study has made them thoughtful of their acts of teaching and learning, and the most effective methods of effecting results. The handling of the elementary branches and school exercises as instruments of education is an art, a fine art, and has its body of principles, expertness in applying which may be cultivated in many persons under favorable conditions; else there is no call for normal schools. There may be very satisfactory scholarship, and a profound knowledge of educational doctrine, and a lack of teaching skill. To have accomplished the first and second aims and to have failed in the last is to have failed in an essential. The normal school is to turn out as its product teachers, not scholars merely, or doctrinaires.

C. F. CARROLL, superintendent of schools, Worcester, Mass.—It seems to me that one business of the normal school is to eliminate the candidates for the teaching profession who do not have natural ability. Such persons can be worn out in the normal school by requiring them to repeat the work of the course. I want to add that I am in complete accord with Mr. Payne. I have never heard anybody maintain any opinions contrary to those of the paper. The normal schools in Massachusetts formerly gave practice to students by letting them practice upon each other. I had some hesitation in opening up at New Britain the first practice school of another kind. Oswego has been reported as having 500 in the largest practice school in the world. There are 1,500 in the New Britain practice school. That idea has spread, and there are now three normal schools in Connecticut instead of one. I believe that every normal school in New Engand is now shaping its work in the same direction. Let us give to Dr. Sheldon, of Oswego, that grand old hero, credit for what was done. The superintendents of Massachusetts now say to a girl who has graduated from college: "We wish you to go to a normal school and into a practice school before you apply for a position as a teacher."

Superintendent Greenwood, of Kansas City.—I wish we might have a definition from the speaker as to his meaning in the remark that a specialist in a normal-school faculty is a menace. It does not follow because one is a specialist that he is ignorant of other subjects. Those who believe in the subjects they teach and are well-bred people, good thinkers and good workers, are a help and an inspiration to all the students in a normal school. I stand for that kind of specialist. The great danger is that persons who are teaching in the normal school may lack both scholarship and inspiration. The specialist is worth a great deal if he does not insist on putting his drawing harness on all the children.

Miss M. Elizabeth Farson, district superintendent of Chicago.—The normal school is in need of open vision. We believe that the normal-trained school-teacher should come to us able to see things from every point of view.

THE DANGER OF USING BIOLOGICAL ANALOGIES IN REASONING ON EDUCATIONAL SUBJECTS

W. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION, WASHINGTON, D. C.

For many years I have been attracted and afterwards repelled by one theory and another relating to education, which undertook to reason from the body to the mind—from the brain to the soul—from the events of animal life to the events of spiritual life, and to explain the latter thru the former. The attempt to reform the school in some particular by the light of physiology, or by phrenology, or by the study of prehistoric beginnings of civilization, has often been successful; but quite as often it has been unsuccessful. In the former case some waste of bodily power has been prevented; in the latter case some more important spiritual power has been dwarfed or paralyzed to gain some less valuable advantage for the body.

When one first begins to think on a subject which has hitherto been purely a matter of routine and tradition with him, he falls too readily into a habit of criticism of the established order and condemns with undue haste. As a consequence his corrections and would-be reforms all need readjustment to prevent them from doing more harm than good. For he has seen only one evil out of many, or only one phase of an evil instead of the whole of it. On this account he may, by removing one evil, let in another and worse evil that has been held in check by the choice of the less noxious one.

I must confess, with a degree of sadness, that I have become from year to year more skeptical in regard to reforms advocated in the name of school hygiene. Not that I doubt the importance of hygiene, but rather that I doubt the attainments of those who talk so glibly about it. For I see them unduly securing minor advantages at the expense of great and permanent injuries to health and normal growth.

The schoolhouse, at first, was only a slight modification on the dwelling-house. There was light and ventilation sufficient for two, three, or four persons in the room. The dark parts of the room were light enough for many purposes of housework, and if one wished to read or to sew or perform the work of cleansing or separating such articles of food as had been ground and needed sifting, or as were composed of small grains or kernels and needed picking over, a seat near the window secured the requisite light.

But the school needed a room lighted in all parts as nearly equally as possible, and with a constant supply of fresh air, heated properly. It was gradually discovered that the room of the dwelling-house was poorly adapted for school purposes. Some pupils got too little light and became near-sighted by holding their books too close to their eyes; some came to have weak eyes by having too much light. For the glare of a page on which the sunlight falls is sufficient to produce partial blindness. Even pure sky light, without the direct rays of the sun, will tend to do this. Many have been the so-called improvements which, in correcting the evil of insufficient light, ignored entirely the great injury done to those pupils who sat in the full glare of the sun or of the clear sky, and for hours, each day, tried their eyes on perceiving letters and figures in small print. I need not speak here of the various attempts to light the room from the front of the pupil, forcing him to strain his eyes in order to make out the words of the page when seen in the direction of the source of light; the experiment of lighting from two sides, the left and the right, with its attendant impossibility of getting the light upon the book from either side without at the same time facing the light of the other side. The light was tried from the right side alone, and the pupil had to have the shadow of his hand on the place where he was writing. Light from the left and rear came at last to be adopted with much unanimity by educational experts in this country in 1876. But the tendency to make large buildings has since that time permitted and encouraged the construction of schoolhouses with one-half of the rooms lighted from one side only; this, too, without due consideration of the relation between the height of the tops of the windows and the width of the room. The consequence of this is that most of our cities have schoolrooms in which there is a row of desks where pupils sit in a twilight and acquire the habit of holding their books too near the eyes; and another row of desks where the pupils have the glare of light that I have described, and the effort of nature to adjust the retina to the overplus of light dims the power of vision below the normal standard.

In the schoolroom of a building altered over from a dwelling-house there is also another attendant evil. The pupils in a row of seats placed directly under the windows are exposed in cold weather to chilling currents of air which are constantly flowing down the sides of the wall and especially down the window surface. Children not of robust constitution often lay the foundation of much bodily disease in this way. Improper lighting, by reason of the sympathy of the eyes with the stomach, produces in pupils of delicate constitution a tendency to nervous dyspepsia. Indeed, the errors in lighting and in avoiding drafts of cold air seem to me so serious that I cannot listen patiently to those who praise the countless devices which are invented for one and another trifling advantage in the hygiene of the schoolroom. For it were better that they had not been discovered than to distract, as they do, the attention from the far weightier matters of light and temperature and ventilation.

One idea crowds out another in some cases, altho in other cases one idea leads to or brings in another. The general idea suggests its applications. But the particular idea having small scope may get in the way of more fruitful ideas. We have to measure ideas as to their relative value and decide for ourselves which may properly give way to the other. For example, take the unhygienic school as it existed and now exists in the countries that are backward in this matter of school architecture, and we must admit that the great purposes of the school were secured and are secured in the log schoolhouse, in the dark, ill-ventilated tenement building rented for a school in a slum district, or in a mere shanty school in the west of Ireland. The great purpose of learning to know printed language; to become eye-minded instead of ear-minded; to gain besides one's colloquial vocabulary also a vocabulary of science and literature and philosophy; to become able to understand and use technical language—all these things came then and come now to the gifted youth without the improvements in hygiene that we clamor for. Abraham Lincoln read by the firelight of the blazing hearth and fed his mighty mind.

It is true that the average of life in those unhygienic days was far less than now. But the illiterate savage does not reach a life average so great as the unhygienic but civilized man, and, what is more to the point, fifty years of Europe is worth a cycle of Cathay. A rational life, growing in the production of science and art and literature, and in diffusing the blessing of civilization, is better than a savage life, even if the latter were to have an average of eighty years, while the former were to have an average of thirty years. According to the merely biologic point of view, life is life, whether of plant or animal or man, and the more of it the better. But such is not the spiritual point of view.

Some years ago Max Müller wrote up the theory of the sun-myth as found in the beginnings of mythology. The stories of the heathen gods were thinly veiled allegories of the solar year, or of the four seasons, or of the diurnal revolution. The words signifying divine things are originally words describing the phenomena connected with the progress of the sun in the equinox, or thru the hours of the day and night. Later on, the sun-myth theory was used to explain all religion. It is all founded on sun-myths. The conclusion was drawn by many devotees to philology that the basis of religion is only a personification of natural phenomena, and that there is no reality corresponding to religious conceptions. It was said that the sun-myth is a disease of language. Then religion came to be regarded also by this school of philologues as also a disease of language. Outsiders who observed this extension of the sun-myth theory began to expect that sooner or later the theory would be carried one step farther, and that philosophic thought would be declared to be a disease of language; and, sure enough, this appears to be the upshot of the book of Professor Max Müller on the *Science of Thought*. This is made plausible by the following step: The words of a language stand for classes and species of objects, and not for mere individuals. *John is a boy* says that John belongs to the class of beings known as boy. The word "is" has universal significance as copula expressing subsumption; the article "a" expresses the general concept "one of," and even the word "John" says any boy who is called John. We have to add to language a meaning of our own to make it apply to a particular individual being, and no one person's meaning of a word is absolutely what another person means by it.

Now, add to this view another one with reference to the nature of objects that exist — namely, that all that exists is composed of some one or more definite things; that only particular individuals exist; and that language has made all its words stand for general classes of beings, actions, and relations, and in so doing has made it entirely symbolic, instead of corresponding, literally and in detail, to reality — and we now begin to see where we are going. It is only one step to the conclusion that all general thought relations rest on the scaffolding of language, and are baseless as regards their truth. Generalizations of thought regarding the world and its destiny are the product of a disease of language. In fact, we might as well call language itself a disease.

But where can we stop? If the anthropoid ape invented the disease of language, his animal relatives who could not yet talk were not for that reason any more healthy. For all animal life is a disease as compared with plant life. The animal feels, perceives with his senses, and acts by impulse or instinct. To feel is to set up an activity within a self and after a sort to make one's self an object, or, so to speak, to exist for one's self. Hence to perceive other beings is to represent them by one's own activity, and thus to create within one's self a semblance of other realities. Perception thus rests upon creating within the perceiving being *an appearance* or semblance of a reality.

This is almost as bad a disease as language is, and we may see that the misfortune of language goes farther back and attaches to sense-perception itself. For the animal that feels or perceives makes for himself an image or representation, in fact, a seeming or make-believe, or some sort of untruth, to stand for the reality.

The plant, it would seem, does not feel nor perceive nor move itself. It does not, like the animal, "dally with false surmise." It feeds on its environment, however. Its life is a life of assimilation and nutrition The plant is engaged in seizing upon its environment, and converting it into vegetable cells, and adding them to its own structure. Here we have reached soundness and health at last, for we have realities at every step. We have the plant a reality which acts upon inorganic substances in the soil and the air, and gathering them to itself makes them over into vegetable cells of its own kind or species. But after the plant has thus acted, it has destroyed the individuality that previously existed in that part of its environment now appropriated for food. It has annulled other individuality to build up its own. What was real as carbon and oxygen and silica and soda no longer is real in that form. As real they are united and converted into organic compounds that form the cells of the plant. As ideal they may be still only carbon and oxygen and silica and soda. If the plant dies, its vegetable cells will be captured by inorganic forces, and these elements (carbon, oxygen, silica, and soda) will reappear in their old form.

Here we have to ask whether the plant life is not itself also a disease. Is it not a masquerade? Does it not act to enshroud the inorganic matter in new forms, making it as vegetable cells possess entirely new properties and lose its old properties? Does it not, after the death of the plant, let the old individuality of the elements reappear? But which is the true reality under the appearance? Is it the inorganic elements, or the organic compounds? Why should we not say that the inorganic is a state of helpless abstraction in which it does not realize its true being? And is it not the life of the plant that lifts up the inorganic into a higher and more concrete and perfect form of existence wherein the inorganic elements reveal the wondrous possibilities that were in them, but not made manifest or brought into actual reality?

And again, if the inorganic is only itself a masquerade, hiding its higher life until by the aid of the plant it comes to actualize or make real its true self, why shall we not say that the plant, also, takes on a higher form of realization when it in turn becomes feeling, perceiving, and willing, on being taken up into the animal organism? For the representation of another existence than one's own is, after all, a higher form of reality for the being that represents. For the inorganic does not fully realize itself until it comes in the plant and the animal to show what syntheses it is capable of, and in what ways it can be instrumental in the process of self representation. Self-representation in the form of feeling is, indeed, something that belongs to the order of the miraculous, as looked at from the standpoint of the inorganic — it stubbornly resists a mechanical explanation.

But now, if we admit this new view of the subject, we must go farther and claim that man, by inventing language, creates a still more wonderful reality. For he produces a sort of counterpart to the general process that appears in chemism, in plant life, and in animal sensation. He gives an appropriate form to universals. Words make fast the fleeting manifestation that goes on in the lower orders of being. Words as tools of thought make possible the grasp of a deeper reality in the universe, which the inorganic cannot compass, nor the plant, nor the mere animal. For thought can grasp the process in which the individuality of the lower order of beings is immersed. Thought can perceive particular things in their causes, and it can think a unity of all causes in a final cause.

We have to return to our first statement, or the statement of the philologist, and entering our protest say, therefore, that religion is not a disease of language nor a disease of any kind. But religion is an insight into the final and deepest order of being — the truth which is under all seeming or imperfect being, whether inorganic, or plant, or animal, or human.

Neither is thought to be called a disease of language because it deals with generalities. For the general process which is revealed in the changes that inorganic matter undergoes, and which take on new forms in plant and animal life, is first seized as the deeper reality by philosophic thought become possible thru language. Thought reaches this deeper reality underlying all actualities, and it joins the voice of religion in saying that the deeper reality is a divine personal reason that reveals itself in the world. That absolute reason has a divine purpose which is the creation of personal beings — training them to individuality in the cradle of time and space.

In the light of this divine purpose, all imperfect realizations, such as the inorganic, may be seen to be more or less appearances having each some fragmentary or imperfect form of being that does not fully and adequately explain itself, altho each step above the inorganic is a nearer approach to the absolute reality. Reversing the biologic standpoint, those lower forms of existence may be called disease. Plants, just because they do not possess feeling and sensation, may be said to be diseased. Then, too, the animal that is less deeply diseased because he possesses sensation and locomotion as well as nutrition — the animal is diseased because he does not possess language. He cannot reach religion or thought.

But man is more healthy and less diseased than any other being on earth, because he can form some adequate idea of the divine purpose of the world, and by that reach ultimate ideals thru which to guide his life. By his thought he can see what the fullness of reality means.

According to biology as it is, many, or indeed all, of the higher facts and activities of man may be regarded as diseases of vital functions. But, on the same ground, life itself may be regarded as a disease forced on the inorganic.

This use of the analogy, however, which makes life itself a disease, leads us to suspect the truth of the biologic view of religion and philosophy, and suggests to us the necessity of turning around the measuring process. We must interpret the lower from the standpoint of the higher. The lower is the incomplete and imperfect being. The higher is the more realized being, the more perfect, and it explains to us the existence of the lower by showing its purpose.

The analogy of the lower order of being does not suffice to explain the higher orders of being. The scale must be inverted before the human can be understood.

DISCUSSION

DR. G. STANLEY HALL followed Dr. Harris' paper in discussion, saying first that he failed to see in it any practical application to the work of superintendents. Again, he believed that modern psychology today almost repudiated the old phrenology of bumps. Expert students of brain localization still differ much as to the extent of even the centers for the upper and lower limbs, eye, and speech, which are best established, and some reject all further localization; but, despite Hollander's absurd book to the contrary, there is essentially nothing in common between modern brain studies and phrenology, which is essentially dead today so far as localization of function is concerned, while its conception of faculties is, if possible, more outgrown and worthless.

As to biological analogies, Dr. Hall held that one of the greatest advances toward a spiritual conception of the universe was the slow but progressive substitution of these life-forms of thought for the old mechanical forms. To bring this about was one of the chief endeavors of Lotze, one of the greatest of modern philosophers. The study of life-forms has given man a vast number of new figures, tropes, forms of thought, terms by which we can both grasp and express the phenomena of life and mind with progressive clearness and accuracy. No one who knows biology can possibly speak of it as Dr. Harris does. For myself I will only say that I associate the divine logos, or word, more and more with the great bio-logos, or spirit of life, that has brooded over the universe and developed all the ascending orders of existence. The fact that students of the mind and soul are casting off the old mechanical conceptions of the world and the machine logic that hammered them out, substituting vital thought-forms, is an immense step upward and onward toward a true spiritual view of the universe.

DR. HARRIS.—The same old trouble that met the phrenologist comes now to the experimental psychologist. The question is: How much does the school exercise the brain? In how much does it give power for the solving of the problem of humanity? We should put the whole brain to school, as Professor Woodward would say if here. As manual training does much in that line, let us have manual training.

In the study of past life, the study of man as an animal, and of other animals in reference to man, is necessary to find what has been done in all these ages. The study of prehistoric man is good for many purposes, but not for the drawing of lessons in education. As we go back, we shall find a period of walking on all fours, a period of fish life — perhaps man was a microbe some time.

The books of life are biological, of course. When the child comes to school, the teacher asks him what he has been learning in reading, arithmetic, etc., and wishes him to go on getting power. He does not care so much about his age or really how far he has advanced. If the child is nine, and understands algebra and geometry, the teacher does not say: " You are in the period of arithmetic." Neither would the teacher undertake to grade a person anywhere on the basis of age. In the grammar school are those who do not seem able to get hold of geometry or algebra, and yet they may be mature in body.

There is a great deal written about adolescence as extending from the age of twelve to thirty, more or less. It is evident that it is not possible to tell much from a biological classification what you should put in the course of study. In the writings I have read it is suggested that this period is the period of sentiment. Would the psychologist say that adolescence is the period of the imagination? Children from the age of one to twelve are more imaginative. Adolescence is the age of thinking. From the standpoint of biology, one to twelve is the age of dolls, and, therefore, to be consistent, every child should be put to playing with dolls. I think the good teacher carefully avoids the imaginative with the adolescent children.

ROUND TABLE PAPERS AND DISCUSSIONS

A. ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

FIRST TOPIC: INSTRUCTION IN THE ELEMENTS OF AGRICULTURE IN RURAL COMMUNITIES

L. D. HARVEY, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, MADISON, WIS.

[AN ABSTRACT]

This question is one that is attracting attention in a number of states, especially of the north-central group. There is a general feeling that elementary agriculture should be made a part of the course of study in rural schools. Last winter a bill was introduced into the legislature of Wisconsin making such instruction compulsory. This bill was quietly killed. The amount that can be accomplished in this line in rural schools is very limited, for two reasons: in the first place, the majority of children are too young to comprehend the subject; in the second place, teachers lack sufficient training to accomplish practical results. This may not seem a very optimistic view, but it is based on results in countries where it has been tried; for in not one instance has it been a success. In 1872 Canada tried the plan, which proved a dismal failure. Later it was tried again, with like result because of lack of preparation of teachers. Ireland, France, Prussia, Belgium, Norway, Sweden, and Finland have had nearly the same experience. But in these countries the work done in schools higher than the elementary grades has been successful.

In the north-central states there is at present a feeling of unrest in rural communities, often a demand for elements of agriculture. The farmers themselves do not know exactly what they want, but ask for something practical. There is a feeling that the pupils of rural schools (and 90 per cent. of them complete their education here) are not fitted adequately to meet the responsibilities of life, especially farm life. A number of the strongest educational men of Wisconsin insisted that a compulsory law be enacted for securing this instruction in rural schools. But this would amount to nothing unless teachers were trained to make the work efficient.

In district schools the conditions are very different now from what they were twenty or thirty years ago. Instead of young men and women, we find children, a great majority under fourteen years of age.' In eighteen schools visited recently, only ten pupils over fourteen years of age were found. The same condition prevails in other states. The first thing needed is that parents send their children to school longer. The courses in our present rural school cannot be extended, but a school may be provided giving a kind of training not found in schools now organized, a training for rural life, an opportunity for intellectual life on the farm. At first this may be considered on a money basis, but after a practical interest is aroused, higher motives may and will follow.

I would advocate a class of secondary schools to meet the needs of those completing the course in rural schools. As an illustration, in Wisconsin, county schools of agriculture and domestic economy are being founded. These have a two-years' course, which may grow into a longer course, designed to meet the needs of boys and girls from the farm. These schools undertake three lines of work: first, the elements of agriculture, including the study of soils, relations of crops to soils, and similar practical topics; second, the study of plant life on the farm, from the economical as well as the scientific standpoint, beginning with the seed and continuing to its care before marketing the product; the same course is pursued with regard to animal life; the use of farmers' tools is also taught; third, such high-school branches of practical value as may be carried along with the above. In these schools girls are taught domestic economy, practically applied to such home problems as preparation of foods, selection and adaptation of foods, with the scientific basis of the same; the ventilation, lighting, and heating of the home. Two counties have voted liberally for the erection of such schools. Similar schools are found all over Europe, adapted to the particular needs of various communities. From these country schools the plan will work down into rural schools in suitable form. This year Wisconsin will try a six-million-dollar experiment. Last year there was a loss of six or seven millions due to the smut in oats. The prevention of this would cost one cent per bushel on seed. The plan of prevention will be put in an *Arbor Day Manual* sent out to all the teachers, and thru them reach the farmers.

DISCUSSION

MRS. VIRGINIA C. MEREDITH, State Agricultural School, St. Anthony Park, Minn.—I agree with Superintendent Harvey as to giving instruction in rural schools. Minnesota has an agricultural high school in connection with its university. Here are five hundred students, one hundred of them girls. There is a six-months' term, which is one of the foundations of its success. A nine-months' term trains the taste away from the farm. Most states have an agricultural college, but no training to make boys and girls eligible for admission. The greatest obstacle in the way of such training schools is their expensive equipment. In the Minnesota school, girls are given the same instruction as boys. Girls also learn something of sewing in connection with a knowledge of fabrics, and of cooking and of foods. The cause of families leaving the farm is often the dissatisfaction of the women, who do not sympathize with farm work because they do not understand it. The future of farming depends largely on what women put into the farm home.

Young men attended this school ten years before girls were admitted, their admission coming by request of the young men. It is a good thing to keep boys and girls together at work, especially at work for the farm.

Here is an illustration of what one of our students accomplished after leaving our school: A girl of twenty began teaching in a country school. In addition to her regular work she gave lectures on plant life; also instruction in sewing, which the boys wanted as well as the girls. As a result, the attendance in this school was the best in its history, and the teacher's wages were raised by the board without request on the part of the teacher. If she had added cookery to her subjects, how many homes she might have affected in that community!

In physiology the child learns that the skin is an organ of excretion, and immediately forgets it. The fact would be of some practical benefit if taught in connection with home life, including bathing, changing and airing of clothing, airing of beds, use of sleep, etc. Man. agricultural high schools are needed in each state, fitting the boys and girls for the life they will lead. Girls often become property owners, and hence have a right to know how to take care of the farm.

SUPERINTENDENT SCHAEFFER, of Pennsylvania.— From what area do the students come? Answer: From hundreds of miles, even beyond state limits.

SUPERINTENDENT BARRETT, of Iowa.— Are these students enrolled in the college? Answer: No, there are about forty students in the college proper.

SUPERINTENDENT CARRINGTON, of Missouri.— In Missouri the state is trying to prepare teachers in such subjects as nature work, preparatory to the work of the more advanced schools. Summer courses in the elements of agriculture are offered to teachers. In twelve weeks much is learned that has proved beneficial to ordinary rural schools, improving and modifying the work as a whole. In southern Missouri a fruit experiment station has been established. This year a summer school will offer a course in horticulture. Some work is also done in the normal schools, each of which has an agricultural department.

SUPERINTENDENT J. W. OLSEN, of Minnesota.— Do district officers show appreciation of these efforts by offering and paying teachers thus prepared better wages? Answer: Salaries are raised, and such teachers are in demand.

SUPERINTENDENT ROBERTS, of Peoria, Ill.— I was much disappointed that the leaders both led away from the subject of agriculture in the rural schools. Superintendent Harvey pronounced the work in the district schools a failure. I think something can be done in a simple, practical way in the rural schools to awaken the interest in the community before they are ready for high school or county school. Many boys never will get to either. There should be something done to get the work down to the district school as an incentive to go on to higher work. An experiment was tried in Illinois; work was planned at the university and outlined and presented to the teachers. Seventy-five per cent..of them tried to carry out instructions. The course was very simple, including such subjects as the kind of chickens raised in the district, lists of vegetables raised in the neighborhood, the baking and boiling of potatoes, garden work, keeping accounts, etc. This work *can* be done in rural schools.

SECOND TOPIC: THE FINANCIAL PHASE OF THE CONSOLIDATION OF RURAL SCHOOLS

CHARLES A. VAN MATRE, COUNTY SUPERINTENDENT OF SCHOOLS, MUNCIE, IND.

To the end that knowledge and learning be generally diffused thruout a community, the various states have provided for a general and uniform system of common schools, to be supported by a public tax. Schools have been established in each community within convenient walking distances of the homes. Owing to the uneven distribution of the population, some communities may have very large schools, in which the per capita cost is small, while the adjoining communities may have small schools, in which the per capita cost is comparatively large. A school of fifty pupils may be maintained at practically the same expense as a school of ten. The principal items of expense are tuition, fuel, supplies, repairs, and buildings. A small school must have the same provisions as a larger one in all these items. The per capita cost cannot be reduced by maintaining each separate school. The only solution to the difficulty is to combine two or more such schools, or to combine them with larger schools. In this manner it may be possible to reduce the cost of tuition by reducing the number of teachers, of fuel by reducing the number of rooms to be heated, and consequently the cost of supplies, repairs, and buildings. While there is a saving in all of these items, another factor is introduced by the consolidation — the cost of transportation of the pupils of the abandoned schools. That the per capita cost of the small schools may be reduced, this cost of transportation must not be greater than the saving in the other items of expense. The reduction in per capita cost and the expense of transportation will depend wholly upon local conditions — the number of pupils to be conveyed, the distance, and the condition of the roads.

The subject may be best presented by studying special cases. The following statistics have been collected from places where the experiment has been made:

	Daleville, Ind.	Cross Roads, Ind.	Selma, Ind.	Royerton, Ind.	Webster, Ind.	Economy, Ind.	Raleigh, Ind.	Warwick, Mass.	Concord, Mass.	Terre Haute, O.
Number of teachers employed in the consolidated school	6	2	4	5	4	5	4	3	12	5
Number of teachers added because of consolidation	.	..	..	3	2	..	3	2	..	..
Number of teachers fewer in the districts	1	1	2	5	3	4	5	8	.	2
Number of teachers doing grade work in the school	5	2	3	4	3	4	3	3	..	4
Number of teachers doing high-school work in the school	1	..	1	1	1	1	1	..	..	1
Total daily salary of the teachers in the grades	$12.25	$5.10	$7.00	$10.30	$7.50	$9.10	$7.20	$5.40	..	$9
Total daily salary of the teachers in the high school	$3.50	..	$3.50	$3.20	$3.25	$3.50	$5	..	..	$2.80
Total number of pupils in the consolidated school	195	53	141	190	140	130	122	96	500	..
Total number of pupils in the grades	186	53	119	175	122	110	104	..	500	..
Total number of pupils in the high school	9	..	22	15	18	20	18	..	..	.
Number of schools abandoned in the township	1	1	2	5	3	4	4	8	5	..
Number of pupils conveyed at public expense	7	7	24	129	50	25	..	60	150	..
Number of pupils conveyed in public conveyance	7	7	24	129	25	14	..	60	..	..
Number of pupils conveyed in private conveyance	..	..	..	..	25	11	..	..	..	..
Number of wagons used	1	1	1	7	2	1	..	4	5	..
Daily expense of drivers	$1.25	$1.25	$1.50	$8.75	$2.20	$0.75	..	..	$12	..
Daily expense for private conveyance	..	..	..	..	$2.20	$0.40	..	..	..	.
Cost of wagons	..	..	$100	$500	..	..	..	..	..	..
Cost of fuel per room per year	$30	$30	$30	$30	$32	$15	$37	..	$50	$20
Cost of all other supplies per room per year	$25	$25	$25	$25	$20	$20	$25	..	..	..

From the above list it may be seen that Daleville, Ind., has a school employing six teachers. Five are doing grade work, while one is doing high-school work. A small school of seven pupils is conveyed to this school. No additional expense is incurred in the Daleville school because of the admission of these seven pupils. The only expense for these seven pupils is the cost of transportation, which is $1.25 per day. To maintain a separate school for them would cost much more than this amount. Other district schools in the township in which this school is situated cost from $2.75 to $3 per day. The same results would be secured had the school as many as twenty or twenty five pupils. All could be conveyed in one wagon, and the large school would still admit them, since they would be distributed thru the grades. No one teacher would receive all of them.

Cross Roads, Ind., shows similar conditions. A school of seven pupils is conveyed to this school, which employs two teachers, at the daily expense of $1.25. The saving in this case is the same as at Daleville. These two schools are located in the same township. The wagons are provided by their drivers. Thus the total expense for each is $1.25 per day. The saving to the township is from $3 to $3.50 per day. For a seven-and-a-half-months' term of school the saving is from $450 to $500 per year.

Selma, Ind., shows even greater results. Two schools have been abandoned and combined with the Selma school. The pupils — twenty-four in number — are conveyed in one wagon at a daily expense of $1.50. No additional teaching force is required in the Selma school. The saving to the township is about $600 per year.

As a solution to the rural-school problem, the school at Royerton, Ind., is a fruitful field for study. Six districts, comprising an area of about eighteen square miles, have been combined into one. The union school is located at Royerton. Under the separate-district plan seven teachers were employed — two at Royerton and one in each of the other districts. Now five are employed in the union school, a difference of two teachers resulting from the change. Three teachers are doing grade work, one does high-school work, and one divides his time between grade and high-school work. Some little high-school work was given when there were but two teachers in the Royerton school, but no high-school work was given in the district schools outside of the Royerton school. Under the separate-district plan seven rooms were maintained. Now there are but four, and a small room used for recitations, which adds no expense. No additional buildings were needed at Royerton, due to the fact that there was an old building which had not been in use for several years. Thus there has been a saving in tuition by reducing the number of teachers. Not considering the high school, four teachers do the work formerly done by seven teachers — a difference of three. The cost of fuel, supplies, and repairs for seven rooms has been reduced to the cost of four. There are 190 pupils enrolled in the school, 129 of whom are conveyed from the abandoned schools — about two-thirds of the number enrolled in the union school. The daily expense for transportation is $8.75. The following will show the comparative cost of the two plans:

DISTRICT PLAN

Salaries for seven teachers for seven months	$2,492.00
Institute fee for seven institutes	124.60
Fuel for seven rooms at $30 per room	210.00
Supplies for seven rooms at $10 per room	70.00
Repairs at $20 per room	140.00
Total	$3,036.60

CONSOLIDATION PLAN

Salaries for four teachers for seven months	$1,442.00
Institute fee for seven institutes	72.10
Fuel for four rooms at $30 per room	120.00
Supplies for four rooms at $10 per room	40.00
Repairs at $20 per room	80.00
Total	$1,754.10
Transportation, at $8.87 per day	1,225.00
	$2,979 10
Difference in favor of consolidation	57.50
	$3,036.60

The salaries shown in the above estimate are the actual salaries paid the teachers. The cost of the fuel has been estimated upon a coal or wood basis. The supplies include maps, globes, charts, desks, books of reference, etc. The repairs include fencing, wells, pumps, floors, windows, papering, janitor work, etc. These are only estimates. If there is any error, it has been in making them too low. However, this would only make the saving greater, and does not interfere with the argument. Buildings are not included. There was no additional expense for buildings.

PER CAPITA COST

	Consolidated Plan	District Plan
Tuition per day	$0.060	$0.100
Transportation per day	0.067	......
Other items	0.012	0.041
	$0.139	$0.141

The pupils of the original Royerton school are not transported, which makes a reduction from 14.1 to 7.2 cents per capita. There are about sixty pupils in this district.

In the township in which Royerton is situated there are other schools not centralized at Royerton. Each of them enrolls more than thirty pupils. The cost of tuition cannot be greater than 8 cents per capita, using as a basis the same rate as used in the other estimates — $2.50 per day. The cost of transportation cannot be much less than 6 cents per day per capita, considering that the average cost of driver, wagon, and team is $1.25, and that a wagon may convey from twenty to twenty-five pupils. If there be thirty pupils, two wagons may be needed, which would increase the per capita cost. To consolidate such schools would be more expensive than to maintain separate schools.

Webster township, Wayne county, Indiana, has centralized all its schools at one point — the town of Webster. But two wagons are used. The township is small, and much of the school population is centered near Webster. The outlying districts have a very small school enumeration. It has been found very much more satisfactory to convey the pupils from the three out-districts to the Webster school than to maintain these small schools. Three schools have been abandoned. To maintain these schools would cost from $8 to $9 per day. Aside from the high school but one teacher has been added to the Webster school because of the consolidation, at an expense of $2.50 per day. Twenty-five pupils are conveyed in two wagons at a daily expense of $2.20. Twenty-five pupils are conveyed in private conveyances at about the same expense.

Perry township, Wayne county, Indiana, shows similar conditions. The township has one school at Economy. The rural population is scattering. Twenty-five pupils are conveyed at a daily expense of $1.15. Formerly there were four schools maintained in addition to the Economy school; now there are but twenty-five pupils not within convenient distance of the Economy school.

MASSACHUSETTS

Six years ago Warwick maintained nine schools twenty-four weeks per year. The average attendance of pupils in the town was eighty-seven. Teachers' wages in the eight outside schools were $5 per week; in the center school, $6 per week. With few exceptions, the teachers were young and without experience, educated in the district schools. Some were under sixteen years of age — one term a pupil in a school, the next term a teacher. Occasionally, in recent years, a teacher of marked ability and successful experience has been employed, but the number of schools made it impossible to pay wages that would retain the services of well-qualified teachers many terms. The schools were poorly supplied with books and materials.

Now all the pupils in town are in three rooms of one modern, well-lighted, heated, ventilated building, pleasantly situated in the center of the town. The rooms are supplied with good blackboards, and with books and appliances for the use of pupils. The school has three teachers — normal-school graduates of exceptional ability. The average wages paid are $9 a week; the school year is thirty-six weeks. Special teachers of music and drawing visit the schools each week. Pupils are conveyed to the center union school from distant parts of the town. The average attendance in the fall term was ninety-six — a gain over the attendance in all of the nine schools six years ago. The schools are well-graded from lowest primary to highest grammar grade, three classes in a room.

Teachers are selected whose qualifications are especially adapted to the ability and needs of the pupils under their charge. The number of recitations being less than in ungraded schools, the teachers and pupils do much more effective work. The relation of the teachers to one another is one of mutual helpfulness, and the association of so many pupils in the schoolrooms and on the grounds under the supervision of the teachers is pleasant and beneficial.

As a result of the consolidation of its schools and a wise administration of school affairs, the town has in six years lengthened the school year 50 per cent., increased the teachers' wages 75 per cent., and employed special teachers for drawing and music, without materially increasing the school tax of the town. Because of the reduction of the number of schools thru consolidation, the cost of instruction by the regular teachers has been lessened. A large increase in the amount of money received from the income of the state school fund has been of great benefit to the schools.

Much time that would be needed for travel by the superintendents and special teachers in reaching many small scattered schools is saved for profitable use in the one building in the union school.

The citizens of Warwick have manifested a deep interest in their public schools by the employment of an efficient superintendent, the erection of a school building which is a credit to the town, the consolidation of its schools, and the employment of efficient teachers.

In general, it may be said that any school in which the daily per capita cost exceeds 15 cents may be consolidated with other schools without increasing the expense. This estimate will be true when the cost of tuition is $2.40 per day. This rate will be reached when the enrollment of the school falls below twenty, and the conveyance may be made with one wagon.

Considering that a teacher may successively teach a school of fifty pupils, provided that but one or two grades be represented, and that he receive $50 per month for his services, the minimum cost of tuition will be $1 per month per capita. Also considering that wagons may convey from twenty to twenty-five pupils, and that the cost of wagons, drivers, and teams will be from $1.25 to $1.50 per day, the minimum cost of transportation of pupils will be $1.20 per month per capita. The cost of repairs, supplies, and fuel will be about 20 cents per month per capita. The total cost of maintaining the school of fifty pupils will be $2.40 per month per capita. With this estimate as a working basis the following s compiled:

TABLE SHOWING THE RATE LEVY PER $1,000 FOR A GIVEN NUMBER OF PUPILS FOR A GIVEN LENGTH OF TIME WHEN ALL ARE CONVEYED

NUMBER OF PUPILS	NUMBER OF MONTHS AND RATES				
	1 Month	6 Months	7 Months	8 Months	9 Months
100	$0.24	$1.44	$1.48	$1.92	$2.16
200	.48	2.88	3.36	3.84	4.32
300	.72	4.32	5.04	5.76	6.48
400	.96	5.76	6.72	7.68	8.64
500	1.20	7.20	8.40	9.60	10.80

The rate of tax levy may be computed from this table for any number of $1,000 for a given number of months and for a given number of pupils. Divide the rate of tax levy shown by the table for a given number of pupils for the given number of months by the given number of $1,000, and the result will be the rate of tax levy on the dollar. For instance, the number of pupils in a certain township is 400; the desired length of school term is eight months; the assessed valuation property is $1,000,000. By referring to the table the rate is $7.68; dividing this amount by 1,000 gives $0.00768

—the rate on $1, or $0.768 on $100. This rate would be excessive for the state of Indiana. The maximum rate established by law is $0.96 on the $100. The maximum special school levy which must provide for all expense other than tuition is $0.50 on the $100. The maximum tuition levy is $0.35 on the $100. These are the local levies. In addition to these levies the state levies a tax of $0.11 on the $100, which is collected from the various counties and redistributed, together with the revenue on the permanent school fund, in proportion to the school enumeration. Deducting the $0.11 levied by the state in the case cited above, the local levy would need be $0.658 on the $100. Not having made provisions for buildings in the estimate for this levy, the rate approaches too near the maximum local levy—$0.85 on the $100. A margin of $0.30 on the $100 should be left for cost of buildings, the remaining $0.55 should pay all other expense for maintaining the school. However, in the township being considered no more than one-half the pupils would need be conveyed. By centralizing at two points the other one-half would be within convenient walking distance from the union schools. To convey but one-half would reduce the levy from $0.658 to $0.466 on the $100. This rate would not be excessive. Most cities and towns levy higher rates.

For additional illustration another specific case is given. A certain township enrolls 300 pupils; the desired length of school term is seven months; the assessed valuation of property is $850,000. By referring to the table the rate is $5.04. Dividing this amount by 850 the rate is $0.00593 on the $1, or $0.593 on the $100. Deducting the $0.11 levied by the state, the local levy is $0.483 on the $100. If no more than two-thirds of the pupils would need be conveyed, the rate would be $0.39 on the $100. The conditions in this particular township are such that not more than one-half would need be conveyed. In such case the levy would be $0.33 on the $100.

The illustrations given cannot be universally applied. However, the following summary may have general application:

1. To convey all pupils will require an excessive rate of tax, unless the number of pupils be small and the assessed valuation property large.
2. The township with a school enrollment of one hundred to an assessed property valuation of $250,000 may convey one-half the number of pupils with a reasonable rate of tax levy.
3. Any school with an enrollment of fewer than twenty pupils may be combined with a similar or larger school at no increased expense, provided the distance be not too great for the transportation, and the roads permit of easy and rapid transit.

DISCUSSION

SUPERINTENDENT SCHAEFFER, of Pennsylvania.—Is the consolidation law compulsory in Indiana? Answer: It is not. Districts on petition vote themselves in, but trustees may join a school of less than twelve pupils without waiting for a petition.

DR. SCHAEFFER.—What is the usual cost of transportation? Answer: From $1.25 to $1.50 per day. In Ohio from $8 to $45 per month; average $18 or $19.

SUPERINTENDENT BAYLISS, of Illinois, asked Superintendent Bonebrake, of Ohio, if any schools in that state had discontinued the plan. Answer: A very few, where the opposition had gained control of the board; but sentiment in favor of the movement is constantly growing, as is shown by the numerous calls upon the state superintendent to speak on this subject.

SUPERINTENDENT FALL, of Michigan.—While the plan is not in operation in Michigan, there is a great and growing interest in the subject. In comparing the school expenses of the city of Jackson with the cost of the ungraded schools in the twenty townships about it, it was found that the per capita tax in Jackson was $1.27, while in the country it was $1.60. This shows that the country children should have at least as good an education as the city children, for their parents pay more for it. In eight country schools visited in one area the highest enrollment was thirteen, the lowest six; each of these contained worthless reading charts costing $37.50 apiece.

SUPERINTENDENT B. E. YORK, of Kingsville, O.—The consolidation of rural schools in Ohio began at Kingsville six years ago. Now the whole town is consolidated; at the last election the vote carried six to one in favor of the plan. The gross expense is a little more, but the per capita expense is less. A high-school course of four years has been established, and there are seventy-four pupils in the high school.

SUPERINTENDENT COLLINS, of South Dakota.—The advantages of the system more than outweigh any small increase in cost. Farmers will be willing to pay a little more if they see results. Great interest is shown in South Dakota. Many are opposed, but do not give the cost as the reason for opposition. Social conditions must settle the question. In prairie states probably three-fourths of the towns might save money. If the schools were large, consolidation would add to the cost; if small, it would not.

SUPERINTENDENT BRIGHT, of Cook county, Ill.—The two subjects on the program are closely related. There would be a good opportunity for instruction in the elements of agriculture in the high schools established by consolidation of the districts.

COUNTY SUPERINTENDENT W. G. HARTRANFT, of Seattle, Wash., said he had come to the meeting expressly to hear this topic discussed. There are so many schools in Washington of three or four pupils that something should be done. He is urging consolidation. He reaches the farmers by a paper explaining and commending the plan.

SUPERINTENDENT BONEBRAKE, of Ohio.—Centralization not only gives better results in the grades, but results in the formation of high schools. Such has been the experience in the townships of Ohio. Sixty-three new high schools have been established this year. Growth of libraries and the bringing in of lecture courses have also followed consolidation. These high schools should not imitate too closely the high schools in large cities. Review work in the common branches should receive attention as well as advanced subjects.

B. ROUND TABLE OF CITY SUPERINTENDENTS

TOPIC I: FOUR MINOR DUTIES OF A SUPERINTENDENT

I. C. MCNEILL, PRESIDENT STATE NORMAL SCHOOL, SUPERIOR, WIS.

The four topics I am asked to touch upon in this short discussion relate to the selection of teachers, the elimination of teachers who are not intellectually prepared, the elimination of teachers who are not morally prepared, and the stimulation of teachers to reach the fullest measure of individual strength so as to render, thru active co operation, the most efficient service.

SELECTION OF TEACHERS

Every superintendent is confronted with serious problems in the selection of new teachers. There are economic, practical, and prudential reasons for selecting some people of little experience from one's own city. The superintendent and the school board have opportunities, because of their residence in the neighborhood, to make closer analyses of the intellectual and moral fitness of inexperienced home applicants than they can make of non-residents. Worthy and loyal teachers who are important factors in the community life can render abler service in interpreting the schools to the patrons, and the patrons to the system, than equally well-prepared strangers can give.

Notwithstanding these facts, it is exceedingly dangerous to employ young teachers fresh from the high schools. They have vague notions of the duties teachers must assume, and are able to give no better reason for their employment than Micawber could give for the practice of law. Untrained high school graduates have been in contact with teaching processes as pupils, while Micawber had been in contact with legal processes many times as defendant.

High-school graduates of worthy character and exemplary habits should be encouraged to take two-years' courses in good normal schools, supported at public expense or by ample endowment, where subject matter, ideals, and work can in no way be influenced by fees paid for tuition. After the training and the close sifting of well-equipped and well-conducted normal or training schools, the young teachers will be anchored to some fundamental notions so that they can begin to adapt themselves, subject-matter, methods, and government to the capability of the taught. With very few exceptions, the most able and successful teachers in any large system are they who have had professional training in normal schools. It is the experience of most superintendents who have studied the question in all its phases that the probability that young teachers will succeed is greatly increased after graduating from a well-conducted training course.

New blood should be infused into the city school system by selecting some teachers of recognized training, scholarship, successful experience, and pleasing and worthy character from outside every year. It is a menace to the best interests of the schools to erect a wall so high that it is not possible to scale it and secure the most efficient service without regard to municipal or state lines.

The superintendent should base his recommendations for the selection of new teachers upon his own knowledge when possible; and, in other cases, upon honest, expert, disinterested advice from people who, thru contact and visitation, know the teacher at work, and have given attention to the personality, the scholarship, the organization of knowledge as illustrated in the recitation, and the kind and efficiency of his or her discipline. Special care needs to be exercised to distinguish between the personality that wins the visitor because of blandishments, and the personality which guides the children to cheerful and independent work because of the presence of character. As a matter of fact, many selections must be made upon information given by interested parties, such as personal friends and teachers' agencies. In such instances the information should be considered as tentative rather than final; and verification of it ought to be sought from all other sources at command; for all mistakes reflect upon the judgment of the superintendent. The more confidence the community has in the honesty and soundness of the superintendent's judgment, the more hearty and generous will be the support given his school administration.

ELIMINATION OF TEACHERS WHO ARE NOT INTELLECTUALLY PREPARED

There is hope for the teacher who is weak in scholarship but strong in character. Elimination does not necessarily mean retirement. Weak scholarship in many instances may be overcome.

As a general line of action, it is my opinion that the superintendent should attempt to stimulate self-culture, and thus eliminate weak scholarship by study, observation, and reflection, rather than by dismissals; yet, retirements because of weak scholastic attainments sometimes act as a powerful spur and cause intellectually inefficient teachers to embrace every opportunity to grow in knowledge of facts and plans of organizing them, as well as in methods of teaching. The problem of inefficiency cannot be solved by retiring all teachers of poor scholarship; for frequent changes in teaching force usually lower the vitality of a system of schools. It is well for the superintendent to be animated by a desire to stimulate poor teachers to become fair teachers and fair teachers to become excellent.

Teachers who are inefficient in one grade may sometimes do better work in another where tact and management count for more than scholarship. Such teachers will usually be found ready and anxious to follow courses of study for self-improvement. The superintendent, or someone under his direction, may form classes in which the facts of the branches, one branch at a time, and the organization of the facts into teaching plans, are taught at stated intervals until the fundamental branches are understood and organized in the minds of teachers of poor scholarship. Teaching plans, such as State Superintendent L. D. Harvey, of Wisconsin, has promulgated, are heartily commended, and might well test both scholarship and the organization of subject-matter with teachers of the class now under consideration.

Summer schools, conducted by educational experts, in which teachers attempt not more than two branches, often help teachers rich in character but poor in scholarship to be able to approach their duties in such a way as to do violence to no child brought under them for instruction and moral guidance.

The most effective means of helping is to win the confidence of teachers of this class and induce them to ask for leave of absence for one or two years to enter upon a scientific study of the branches and the general subject of education in a well-equipped normal school. When they shall have completed the course of study, their places in the system should be opened to them without doubt. I personally know superintendents who have followed this last-mentioned plan to the decided betterment of their schools. Many of the teachers who are thus helped soon prove themselves superior and are in line for promotion when better places are open.

In dealing with all teachers of the class now considered the utmost frankness and the fullest sympathy should characterize the intercourse of the superintendent with them. They need the uplifting influence of honest hearts and friendly hands in overcoming obstacles which stand between them and due proficiency. One of the greatest rewards that may come to a superintendent is the consciousness of having placed about a teacher of poor scholarship and beautiful character such influences as induced her to make preparation for a larger and a fuller life which culture and training enabled her to reach.

ELIMINATION OF TEACHERS WHO ARE NOT MORALLY PREPARED

This topic is one that causes the superintendent the greatest concern. Teachers who are morally prepared have trained and logical minds, high ideals of right and equity, active and sensitive consciences, steady wills, persistent purposes, keen sympathies, and an abundance of common-sense. The teacher who is weak in character lacks in development of mind, of ideals, of manners, of conscience, of steadiness and persistence of will, of sympathy, or of common-sense, but not of all. The teacher who is positively depraved represents arrested development or active degeneration in intellectual or moral lines. Such a person is short sighted and looks to present selfish gratification.

A very few forms of moral disqualification may be overcome. The indiscreet teacher in her actions outside the schoolroom may sometimes be saved by a frank request from the superintendent that she change her course of conduct concerning the things he sets forth in a firm but pleasant manner. The passive teacher, correct in her own personal habits, lacking power to exert an active, positive influence for right in her pupils, by association as assistant with a positive, aggressive type of teacher may sometimes, but not often, thru imitation, be brought into the light of clearer ideals and caused to take on a disposition to guide the energies of children and secure a power to control.

The nagging teacher, the fuming teacher, the vindictive teacher, the slovenly teacher, the untruthful teacher, the giddy teacher, and many other types of teachers who are not morally prepared, should in very many cases be advised to find other avenues of employment. The school's great aim is to train the character of the pupils, not the character of the teachers. Elimination by substitution is the safest method of dealing with teachers who are morally unfit for their duties.

STIMULATION OF TEACHERS TO FOLLOW RIGHT IDEALS

The superintendent's task of stimulating each individual to do his best in teaching, in managing, and in carrying out plans for private practice or public policy is one that tests training and common-sense. The superintendent who, thru a laudable desire to secure the greatest efficiency, insists that *his* plans in the minutest details shall be the only guide for individual faith and practice, soon finds himself rated as an educational czar. There is danger that such a man, no matter how great an educator he may be, will kill off by the "starvation plan" individual initiative and hearty support which are always needed to give tone and public confidence.

On the other hand, the "good fellow," who makes it his chief business to "stand in" everywhere in the course of time, is looked upon as a person without educational character. Such a superintendent is often made the tool of designing egotists with their factional organizations. He becomes unable to enlist effort to improve, because he lacks the power or courage to recognize individual merit by directing attention to personal worth or by promoting deserving persons when opportunity arises.

The superintendent needs, thru contact with teachers and thru observation of their class-room work, where he may estimate the intellectual and moral development of pupils, to have an intimate knowledge of the working power, scholarship, educational philosophy, habits, and abilities of the teachers, that he may encourage them to keep on doing well the things that are done well and to change ideals and practices regarding the duties that are done poorly. Monthly teachers' institutes and grade teachers' meetings at stated intervals, if planned to establish clearer notions of teaching or managing and led by inspiring persons who because of acknowledged success or skill stand for ideas, will give zest and purpose to the system. The best interests of the schools will come from a carefully articulated course which starts with conditions as found and leads to consistent and persistent effort to avoid waste and to move in a straight rather than a broken line of progress.

Schools and teachers, because of standing on the solid ground of right adjustment of matter and method to the pupils, should be pointed out so that they may be studied and the sources of superior merit discovered by less forceful workers. When teachers are busy trying to reach safest methods in guiding activity of pupils so as to result in power and character, they are constructive and positive; they lose no time in tearing down good things.

The superintendent should be secure and steadfast, not easily turned aside by the petty worries and sordid cares of the daily turmoil. Some work may be done by the superintendent whose views are narrow and whose ideals are low, but the best work is done only by the man of large heart, broad views, and habitual singleness of purpose. The great superintendent, who realizes that education is a constant force that operates wherever ideas for good or for evil are alive, lives in the minds of associates as an exemplar of honesty, justice, courage, and courtesy. He should have a personality and stand for something in the educational world and out of it. The elements of leadership will enable him to

> "Allure to brighter worlds
> And lead the way."

TOPIC II: MODERNIZING THE COURSE OF STUDY

W. A. HESTER, SUPERINTENDENT OF SCHOOLS, EVANSVILLE, IND.

In his efforts to modernize the course of study, to what extent should the superintendent be governed by: (1) the crack of the college professor's whip? (2) the nervous woman writer's tirade on the "crowded curriculum"? (3) the conclusions of the notoriety-seeking schoolroom experimenter? (4) the demands of the old-school men that all be eliminated from the course of study excepting the "three R's"?

I have a bright young school friend whom I shall call, for the sake of convenience, Charles Merrill. Mr. Merrill is college-bred, thoughtful, sober, sensitive, and almost painfully conscientious. He voluntarily entered the profession of teaching when quite a young man, and, because of his superior intelligence, close study of his work, tactfulness, and devotion to duty, he was rapidly and deservedly promoted, his last position, and the one which he now holds and has held for nearly six years, being the superintendency of a system of schools in a prosperous western town of about thirty thousand people. As a superintendent he has had what may be termed a rich experience. He related much of it to me during last Christmas holiday week, and it was to me so interesting, so suggestive, and is, withal, so similar to that of many other young superintendents, that I venture to present a portion of it for our discussion here today.

He stated that before he took charge of the schools his board told him that their schools were not up to the standard of certain other schools which they named, and that they would expect him to bring them to such standard as soon as it could be done. Having given the superintendency of schools but little attention, said he, I began at once a careful reading of everything bearing on school management that I could find, and wrote to a number of the writers of articles that had impressed me most deeply for fuller statements of their views.

Several of them replied promptly and elaborately, and their letters have been of great help to me many times since their receipt; but others made assertions and expressed opinions that I could not but regard as being dangerously heterodox, they were so diametrically opposed to what I had been taught to believe was good pedagogy. I, therefore, laid their communications aside, determined to allow the writers to prove the pedagogical worth of their theories themselves, rather than risk testing them myself or allowing them to be tested in the schools for the success of which I should be held personally responsible.

The first and most important duty which the new position brought to me was the revision and improvement of the course of study. The old course, as I found it, provided for work in what we usually term the "eight common-school branches," none of the so-called "fads" finding a place in it.

About the first thing which I did, therefore, was to recommend the introduction of a system of drawing, to which I held with a blind faith in the efficacy of the system, tho I knew little of its real educational value, notwithstanding the fun that was poked at our "mud-pie making," our "scissor-cutting nonsense," and our "failure to turn out artists." A proficient and popular supervisor soon quieted the spirit of unrest, however, and things have gone serenely on in that department of our schools ever since.

The necessity for a complete course of nature work for the grades was also urged upon me, and what appeared to me to be a carefully worked out scheme of nature study was presented to the board, which readily adopted it, and then to the teachers, who sighed, but acquiesced and went faithfully to work to master the new subject as it applied to their respective grades.

Of course, time had to be set apart for the two new subjects of drawing and nature work, and it had to be taken from the time formerly devoted to instruction in the other branches.

Right here the college professor offered his assistance. He commended me for what I had done in "shortening and enriching" the course of study, but said that my work had not gone far enough. He insisted that further eliminations and contraction should be effected in the old-time subjects, and that a full eight year course in history should be given to the pupils of the grades; that Latin should be begun in the seventh, and that elementary algebra and geometry should be made a part of the eighth-year assignment.

I was persuaded that all this must be done if we would be "up with the times;"

and, as my board had said this must be our condition as soon as practicable, and as our advisors made it so emphatic that all the changes enumerated were essential in any attempt to modernize a course of study, the new subjects were introduced as rapidly as could be done without creating a panic and general strike among the teachers.

In the process of elimination and contraction of the old course much of the technical part of the grammar was sacrificed. This, of course, created dissatisfaction among the advocates of parsing and analyzing, and much complaint was heard from high-school teachers of English, German, and Latin when the pupils began to enter their classes.

Besides this, many of the topics in arithmetic previously dwelt upon by teachers and labored with by pupils were stricken from the assignment and the course in that branch shortened a full year. The criticisms which this elicited from a number of our pioneer, but substantial and highly respected citizens, products of the old school, were such as I do not care to repeat. It is sufficient to say that no argument presented to them was strong enough to convince them that the new was a great improvement over the old. They held tenaciously to their demand that the "new-fangled notions" be dropped and the "three R's" be emphasized.

The course of study in geography was next abbreviated by substituting a one-book course for the two-book course then in use. One year's work in geography was thus saved and the time given to the new subjects.

But this was not the end. The vertical-writing wave reached us, and in its mighty roll threatened to submerge us and thus to consign us to oblivion; but we mounted its crest with the other progressives, and the change from the more rapidly written but now condemned slant to the slower but popular vertical was soon effected. Altho the penmanship of the older pupils was for a time almost illegible, all ere long were writing the so-called vertical script, which in most instances was a plain backhand.

These changes, together with the addition of two oral lessons per week in scientific temperance, made necessary by a recently enacted law in response to a demand of the Woman's Christian Temperance Union; two oral lessons per week in patriotism, as requested by the Grand Army of the Republic and the Daughters of the American Revolution; two five-minute exercises each day in calisthenics; and one ten- or twenty-minute period each day given to vocal music, afford some idea of the evolution thru which those schools passed during the first three years of my superintendency.

Much of the time during the next two years I spent in defending the schools against what I felt were unjust attacks from evil-disposed persons. But these did not disturb me quite so much, nor have they been so difficult for me to meet, as the criticisms of persons who I have had every reason to believe were friends of the schools.

Intelligent and ambitious parents claimed that their children, their daughters particularly, were being unduly burdened with work. As gentle reminders, some of them sent to me marked copies of magazines and pamphlets that contained long and scathing criticisms on the public-school system in general because of its "death-dealing work with the youth of the country."

On investigation I learned that many, tho not all, of our girls who were reported to be slowly breaking down were naturally delicate or very nervous in temperament and incapable of sustained effort; or were members of society, whose demands on their time and strength consumed the better part of their vitality, and their school work, too often a secondary consideration, was a consequent sufferer. Many of the boys, yet not all of them either, who were reported as not being able to keep up with their classes were found to be cigarette fiends, a condition which seemed to have rendered them almost wholly incapable of steady and continuous mental application; while others realized as keenly as did the girls the demands of the social circle on them, and they felt constrained to respond to this demand even to the detriment of their school work.

To meet these difficulties and to allay them, if possible, by affording the patrons of the schools a fuller knowledge of the policy of the schools in their changed conditions, and thereby bringing the patrons into closer touch and sympathy with the schools, mothers' meetings were held in various parts of the city. While some of these meetings were deemed successful and profitable, many of them were dominated by persons of strong personality and good following who criticised in such severe and convincing terms much of the really good work of the schools, which they could not understand nor appreciate, that harm to the schools rather than good resulted from them. We have not tried fathers' meetings, said he. We fear it would not be wise.

During the third year of my term of service, one of the members of my board learned that written examinations had been tabooed in several schools that he was told were thoroly "up to date," and he insisted on their being abandoned, as an experiment at least, in our schools. He was so enthusiastic, yet so kind, in the expression of his wishes in this respect, that the experiment was tried, and now nothing but written tests are known in the schools; and, tho there are now two or three times as many written tests as there were formerly written examinations and tests together (a condition which seems to prevail also in the schools to which he referred), he is pleased and claims credit for the change, and is congratulated by certain patrons who called his attention to the "desirable improvement."

As tho this were not enough, a movement, the strength of which I have not yet been able to determine, has lately been started by the mothers' clubs of our city, having for its purpose the breaking up of gradation in the schools and the substitution of individual instruction. It is claimed that this system of instruction is in successful operation in a number of good schools; that it is now no longer an experiment; and that it is certain to supersede the graded system or class teaching. Their immediate presentation to our board of the superior claims of individualism is prevented, I understand, by the difficulty which the ladies are experiencing in determining which of the several "best individual systems" is the best for our schools. As soon as they reach a mutually satisfactory conclusion in this respect, we shall doubtless hear from them.

While the ladies have been busying themselves about this "great cure all" for the ills of the schools, I have been endeavoring to find our true bearings and to determine, if possible, whither we are drifting. I have questioned myself with all the sincerity of an honest questioner, and have been trying to answer the questions just as honestly: Have we really improved on the old as much as we have tried to convince ourselves and our friends that we have? Does our present course provide for solidly progressive work? Is it a pedagogical unity? Is the work as now outlined well articulated and wisely purposeful, or does it encourage and almost compel scrappy and superficial work?

To be candid with you, I am not satisfied with present conditions, and, tho I am ready to acknowledge having made mistakes, if I can be satisfied that such is the case, and I am willing to rectify where defects occur, still I am more or less uncertain where to begin or just what to do.

In the first place, I am becoming more and more strongly of the impression that there is truth in the statement that the majority of our school children have too much to do. Both they and the teachers, I fear, are overburdened. Nor do I feel that we can prune the old course any more than we have by way of relief. I am not certain but that some of the old citizens are about right in their statements that we have already crossed the danger line in our eliminations. I am now sorely tempted to undo some of the things which we have done in the name of progressiveness and modernization.

To be specific: While I see some virtue in the work done by the pupils of the eighth grade in concrete geometry as a help to them in mensuration, I have little faith in the value of the smattering of algebra which they get, and less faith in the educational worth of the Latin which the seventh-years learn in a year's time. I am persuaded, too, that we ought, in the interest of a more thoro grounding of the children in the essentials of an elementary education, attempt to do less in history below the seventh grade and less in nature work above the third, and concentrate our efforts on the other subjects. The use of nature work as a basis for the development of the power of expression in the first three primary grades, its formal and regular teaching in those grades, render it so valuable as to make it really indispensable there, and it should be retained. Above the third grade all that is of especial value in nature study, it seems to me, can be taught incidentally in connection with the teaching and illustration of the other subjects and in correlation with those subjects.

Almost the same thing may be said of history, with the exception that its regular and formal teaching be begun in the seventh-year grade, but that in every grade below the seventh the reading assignment be so made as to give large attention to biographical and historical sketches and nature stories. I would retain the course in drawing, but cause it to take two distinct lines, one looking to industrial training work and the other to the development of the artistic sense. I do not expect to worry about the work in penmanship. It will take care of itself, and sooner or later the natural slant will take the place of either a forced vertical or a prescribed slant.

These eliminations and combinations — call it retrogression, if you will — will greatly lighten our work and will give two or three periods each day for manual-training work in the grades, the kind of education that, in my judgment, is well worth planning and sacrificing for; for I believe that the good accruing to the boys and girls from such training is by no means equaled by that which they can realize from the effort and time which they must give to the subjects I am proposing to eliminate, and which have heretofore stood in the way of manual-training work.

What think you, said he in a most appealing way, of my conclusions? Do you not think that the interests of my boys and girls demand such action on my part?

TOPIC III: HOW TO MEET THE PEOPLE

LOUIS P. NASH, SUPERINTENDENT OF SCHOOLS, HOLYOKE, MASS.

I say nothing here of one's private friendships or social relations. The superintendent will meet the people, if he is inclined to do so, by appearing at various public and semi-public occasions, before associations, etc. It is well to respond to such calls. The superintendent has to exercise leadership in the community, and there is economy in getting hold of a group of people perhaps representative of a class in the community. They may be a set of people that he would never come to know at all in any other way. Of course, one will not take up these things so as to use too much time or to admit the impression that the superintendent likes to pose before the public.

Then there are the interviews with people at the office. I suppose we all have a great many of these interviews, and some that are mere waste of time. Yet it is my opinion that we should encourage the people to come. If there is friction or dissatisfaction anywhere in the system, it is great good fortune if the people affected will come straight to headquarters and give an early opportunity to set matters right. Every such interview gives the superintendent a chance to find out the exact feeling toward the schools of some individual, and he may represent a great many more. It also gives a chance to show that person the right course to take, and, if possible, to secure his support.

The superintendent of schools ought to be the most accessible man in the city. That does not mean that one must be on call all the time. We should keep definite office hours; but we must have time for study. We are false to our own selves and to the higher needs of our schools if we do not take definite times for our own study in professional lines, and in philosophical or literary lines as well. But by being accessible I mean especially the attribute that welcomes approach by the people. We have to teach the people; very well, we should get as close to the people and to as many of them as possible, and I think it is an error for the superintendent to want to be free from approach or suggestion by the people.

There is a movement now in the development of civic life to make the heads of departments practically free from control. "Responsibility of the heads of departments" is the cry, and it has been helped along by writers whose opinions harmonize with those of Mr. Bryce. Upon this principle, there are school superintendents who wish to be autocrats. The movement, however, is a mere eddy in the great development of government in this country, as well as all over the world, which is making for greater dependence upon the whole mass of the people. We have started out in this country to realize the democratic ideal; we believe that on the whole and in the long run, despite errors that can doubtless be shown, it is better to put the direction of affairs into the control of all the people. So far the results are fairly satisfactory. City government is not a failure; the people are going to exert more direct power, rather than less, and we ought to bend our work and influence in accordance with that tendency. This ought to be a matter of conscience with us. It goes far deeper than mere policy. Abraham Lincoln said that the nation could not long endure half slave and half free, so it would not long endure half moving toward democratic ways and half toward autocratic ways. Growth is sure to be along democratic lines. Even the president, burdened with a load of cares without precedent in history, finds it a benefit to take time to meet all the people. It is not mere policy; there is a strange, spiritual influence; the president gains strength from feeling that he is "in touch" with the mass of the people.

The superintendent of schools, in his own field, needs that same support. If he is a leader of men, then the more he meets them, the more surely and successfully he will lead. The more he meets the people and knows them, the better superintendent he will be.

The teachers' association may contribute to mutual acquaintance, helpfulness, stimulation, inspiration among the teachers. It encourages initiative. It is better for us always to do things for ourselves, even badly, rather than to have things done for us. The planning and carrying on of general teachers' meetings may be done largely by the teachers' association. There is no danger that the superintendent will not have influence in shaping affairs. The teachers' association should have sections or committees engaged in special lines of work: a particular committee to read and advise as to the policy of the public library; a committee on reading, or other subjects; a committee to report on educational progress.

Above and beyond this I think there is a future for the teachers' association, which at present we can only dream, tho some things done or attempted at Chicago, at my neighbor city of Springfield, and elsewhere may give a hint. If our medical association issues a declaration upon some question of public policy that is within its sphere, that declaration is received with great respect. Why should not the teachers' association in like manner exercise leadership and be the recognized authority upon any question that has to do with public education? Why should not its advice be sought and accepted as sure to be courageous, high-minded, wise, the best guidance to be had?

The grade meeting has its peculiar place and usefulness. It is here, in a small meeting, that the superintendent can come close to the individual needs of his teachers. The grade meeting is the place for discussion rather than for lecture or exhortation. Every teacher, tho of briefest experience, should be encouraged to give her views, and the part taken by the teacher, whether of discussion or of exemplification of class work, ought to be at least as prominent as the part taken by the superintendent. Here is the place to go into details of class work, impossible in the general meetings. Here is the place, too, for the superintendent to show his teachers how to be students. Many of our teachers do not know how to study. They are not in the track of the best ideas. They do not know the great currents of thought nor the best books. Ideas are in the air, like Hertzian waves; the teacher should have the means to get their impulse. In the grade meetings the superintendent has a good chance to lead the minds of his teachers into the danger zone, where they are liable to be struck by new ideas.

Pay-rolls and financial statements: In a little city, where one man must do everything, with but little clerical help, clear and economical methods of arranging the office routine are important. I have a city of less than fifty thousand people, and no assistant superintendent. It is necessary that the committee should be kept fully informed, especially on financial matters.

Here is my plan for a pay-roll: The name of each teacher and substitute is written once, for the year. There is a space for every school day. A call comes in for a substitute. A clerk turns to the substitute list; sees who is available; writes the school opposite the name, in the space for that date; sends the substitute; then, in the corresponding space opposite the teacher's name, sets down the name of the substitute. At the end of the month, here are the days all accounted for, and the amount is set down in this space. My principals send a report, but I do not find that report free from errors. At the end of the month the total expense in each ledger account is carried forward into an account of monthly totals. From that it is copied upon a sheet like this: (1) appropriation for each account; (2) expenditure to date; (3) balance to date; (4) bills and orders; (5) fixed charges to end of fiscal year; (6) appoint balance.

This account goes to the board meeting. Some expenditure is contemplated — perhaps new kindergartens to be established. The question always is: "Have we the money?" Here is the positive answer. We have such a balance in sight for the end of the fiscal year. Here is a definite, positive thing that the average school-committee man can understand. He does not know much about pedagogy, but he knows a definite statement of business. And the superintendent who can prove that his estimate comes out just right has gained power and respect which he can use elsewhere.

C. ROUND TABLE OF NORMAL SCHOOLS AND TRAINING TEACHERS

CONFERENCE A.—NORMAL SCHOOLS

TOPIC I: WHAT ASPECTS OF PSYCHOLOGY AND CHILD STUDY ARE SUITABLE SUBJECTS FOR INSTRUCTION IN NORMAL SCHOOLS?

DISCUSSION

PROFESSOR DANIEL PUTNAM, State Normal College, Ypsilanti, Mich.— The necessity for brevity must be my apology for the dogmatic style of this paper.

It is assumed that all agree that the normal school is a special and professional school, having a specific and definite purpose, the preparation of teachers, mainly, for grades of schools below the high school. While broad general culture is very desirable in teachers for such schools, as indeed for all schools, it is not the function of the ordinary normal school to provide the means for such culture. If this becomes its chief aim, its existence cannot be justified. The nature and extent of its courses of study and instruction must be determined by the purpose of the institution. Studies and portions of studies may be included in the curriculum of the normal school for any one of three reasons:

1. Studies which its students are expecting to teach. The instruction in such studies

will be, to a large extent, in the way of reviews, with direct reference to methods of teaching.

2. Some studies which the students may not expect to teach, but a knowledge of which will be of great service in the presentation, explanation, and illustration of the branches which they do teach. Of this kind are algebra for its aid in teaching arithmetic, rhetoric and literature for their help in teaching language and grammar, and English history for its service in teaching United States history. Other examples will readily occur. Instruction in these branches will, in most cases, be reviews with a definite professional end in view. Incidentally such studies tend toward extending the general knowledge and culture of students.

3. Studies a knowledge of which gives the intending teacher a thoro insight into his own nature, into the natures of his pupils, into the nature of the processes of learning, and of the correlative processes of teaching, and most of all into the springs of human conduct, and into the forces, motives, and influences which are most potent in molding and fashioning human character, and in giving right direction to human activities; in other words, the forces and influences most effective in the production of such men and women as are needed in the community for the uplifting of society and of humanity generally.

Among the studies of this third class are psychology, ethics, and æsthetics. Psychology is the only one with which we are now directly concerned; and the inquiry is: What aspects of this study should be presented and especially emphasized in the normal school?

The obvious answer must be: Those aspects best adapted to aid in securing the objects just spoken of. This general answer of course settles nothing. It remains to find a more definite reply by determining, if possible, what are these aspects. In respect to this evidently considerable differences of opinion exist among normal-school men, if one may judge from the varying courses found in normal-school catalogs and yearbooks. It is expected that this paper will present the views of the writer without apology or begging pardon. The same liberty is freely accorded to those holding different opinions. Time permits only the statement of conclusions without the grounds upon which they are based, or the processes which have led to them.

1. All intelligent study of psychology must of necessity begin with the study of self. The intending teacher must, first of all, become consciously acquainted with the various activities of his own mind; with the occasions and conditions of their normal manifestation. In a final analysis, the personal consciousness must be the arbiter upon all questions of internal psychic action, and the authoritative interpreter of all outward manifestations supposed to involve psychic elements or to result from psychic forces. The mind of the normal, sane, intelligent, and fairly developed man is, for the student and for us all, the typical, ideal mind, the criterion or standard by which the powers, activities, and manifestations of all other minds, whether human, super-human, semi-human, or animal, are examined, compared, measured, and estimated. The activities of other minds may be greater or less than our own, but only so far as they can be compared with our own, thru either similarity or contrast, is it possible for us to comprehend or understand them. This fact determines the point of departure and the general method to be pursued in the study of children. If the child is altogether unlike the adult, a different being in kind, it will be a waste of time and energy to attempt to study him. The same may be said of the study of animals, if psychic manifestations in them are in their nature wholly unlike our own.

This aspect of psychology should be especially emphasized in the normal school to prepare its students for intelligent and fruitful study of human nature in the schoolroom and in the community, and for the study of comparative psychology. So far the discussion has been of a general character. It will be necessary to make it more specific and definite.

2. In order to know himself the student must have a fairly thoro knowledge of his physical organism and of the relation of this to what we call mind. Hence we have that aspect of psychology named physiological. This bears to psychology proper a relation similar to that of the vestibule to the temple, or of the gateways and doors to the park and the house. When a new aspect of an old science is discovered and presented, it usually for a time commands and absorbs attention. It seems to many students and to some others "to be the whole thing," if one may borrow a phrase bordering on "slang." This has happened in the case of psychology. The recent tendency has been to give an undue share of time and attention to the doors and the vestibule. An illustration of this tendency has been described in an article in a recent number of the *Forum*.

Physiological psychology and its near relative, experimental psychology, have properly large room in the laboratories of universities and other higher institutions, but only a limited place in the ordinary normal school. It is to be assumed that the students of a normal school have a tolerable acquaintance with the structure of the brain and the nervous system, and with their functions in general. Some additional instruction may appropriately be given on their special functions in connection with sensation and perception, with experiments requiring but little apparatus, and in most cases no apparatus at all.

3. That aspect of psychology which treats of the powers and processes of thinking should receive a large share of time and attention. Apperception, so-called, belongs to this aspect. The processes embraced under this term are among the most important of the mental activities, and are, at the same time, very easily and readily understood, provided they are not obscured and mystified by learned explanations and awe-inspiring terms.

The processes involved in the exercise of judgment and in reaching valid conclusions by the processes of reasoning should be so taught, in a simple and elementary way, that teachers will not impose upon themselves or upon their pupils, or be imposed upon by specious or unsound arguments. The ability to think, and to think correctly and readily, and to express one's thoughts and conclusions clearly and convincingly, is of the highest importance to every instructor. A course in psychology which does not, at least, aim to develop and cultivate this power has small claim to respect.

4. Another aspect of psychology which should have a comparatively large place in the normal school is that which includes the emotions and the sentiments, especially those sentiments which are essential elements in the highest and noblest types of human character. The ethical sentiments are also properly embraced in this group, unless the study of ethics has a separate place in the school curriculum. An extended study of ethical theories is not of great value to the teacher in the common schools and is out of place in the normal school, but practical ethics from a common-sense point of view should receive a good share of attention, either separately or in connection with psychology.

The power of a teacher to build character upon a solid basis, and to give right direction to the activities of those under his charge, to make of them good men and women, depends upon his skill in exciting the best emotions and allaying the bad ones, in bringing into activity the highest and purest sentiments in place of lower and baser ones, and in leading his pupils to act habitually in harmony with the promptings of the best elements of their natures.

5. One other aspect of psychology should receive special attention—that aspect which treats of the self-determining power of man, and of the supreme importance of this power in the practical work of educating and elevating human beings. The psychology which in effect eliminates the power of self-determination from the human soul and reduces the will to the rank of one of its functions, voluntary attention, upturns the real foundation upon which true character must be built, and takes away the strongest incentive to effort for the improvement of the individual and of society as a whole. Extended study and discussion of theories concerning "fate and free will," or "determinism and liberty,"

are altogether inappropriate in an ordinary normal school, whatever they may be elsewhere. Immature minds generally, and mature minds frequently, are confused by such discussions, and left in a condition of unstable equilibrium. They are unfitted to a large degree for giving instruction upon questions of duty and responsibility. Wherever the logic of the book or the inductions of so-called science may appear to lead, there is no question as to the direction in which consciousness, human experience, and the logic of common-sense impel us. They all affirm human responsibility, and consequently some good measure of liberty of choice and self-determination. It is this aspect of what may be termed the psychology of common-sense and experience which needs to be taught and emphasized in the normal school. There is very nearly a crying demand for such teaching, and it should have a place in proportion to its importance.

No one questions the influence of heredity or the power of environment; but the children need to be taught that they possess power which, if resolutely employed, will enable them to overcome, to a large degree at least, the influences of inherited characteristics, and to resist the forces of environment. Besides this, teachers have need to comprehend the truth that they will not develop men and women with abiding characters of moral worth and sterling integrity, characters which will withstand the "storm and stress" of real everyday life, by any process of veneering thru the influence of improved surroundings. These are of value and will be greatly helpful. But true, permanent character must have its roots within, in the power of choice, in self-determination, in conscious personal effort. The child must feel that he can do something toward his own elevation and improvement, and that consequently he ought to do something. The psychology that fails to do this has no rightful place in a school, one of whose primary functions is the development and upbuilding of character.

Dr. W. B. Carpenter wrote, some years ago: "To myself it seems as if nothing was wanting, either in my own self-consciousness or in what I know of the conscious experiences of other men, to establish the existence of the 'self-determining power' for which I contend. I cannot conceive of any kind of evidence of its existence more cogent than that which I already possess. And feeling assured that the sources of my belief in it lie deep down in the nature of every normally constituted human being, I cannot anticipate the time when that belief will be eliminated from the thought of mankind—when the words 'right,' 'duty,' 'responsibility,' 'choice,' 'self-control,' and the like will cease to have the meaning we at present attach to them; and when we shall treat each other as automatons who cannot help doing whatever our 'heredity' and 'environment' necessitate."

PRESIDENT HOMER H. SEERLEY, State Normal School, Cedar Falls, Ia.—Everything taught in a normal school should be definitely and decidedly helpful. There is no time for studies whose provinces and results are not clear and certain. Psychology has such a place and does perform the right service for the teacher, as it gives him the knowledge that enables him to grow in power and efficiency as he extends his tests and ideas thru his experience in the schoolroom.

Psychology may be studied for itself alone, without any relation to vocation or utility, the same as any other science or art; but in a normal school its province is limited to such phases and investigations as will give the key to a successful career as a teacher of children and youth. Such limitation upon the province of the study excludes at once many parts that are interesting and even instructive, because they have no real bearing upon the business of teaching children and youth.

The teacher of psychology in a normal school has plenty to do when he limits his work to the fields of thought and investigation that have a bearing upon educational work. He has no time at all to spend on the obscure, the peculiar, or the eccentric, as there is plenty of the common, the definite, and the real to employ all the time and attention of his classes and to meet their largest needs.

1. There must be a certain knowledge of the science that is general and preliminary. Those beginnings should consist of the main features of the permanently developed normal mind, the greatest stress to be placed upon those features that should have the largest bearing when applications are made to the years of infancy, childhood, and youth. This naturally places the most definite emphasis upon sense-training, memory, imagination, and reasoning as the chief features to be comprehended and identified.

Since these are constantly affected by the emotions and sentiments in their action, there must be a comprehension of these elements of the human mind as a key to the great diversity found in the human family when application is attempted.

2. These fundamental studies furnish a basis for individual investigation of personal cases of the normal type. The interpretation of concrete cases is a constant necessity, and the power to instruct and manage and govern and direct, as well as to assist and to influence, enlarges a person's usefulness in proportion as he can apply his knowledge to the unraveling of human nature.

3. There is no such a person as an "average child," and the normal-school student must know early that he is a scientific myth — suitable for books and discussions, as an ideal to be regarded in the making of courses of study, in planning a program of studies, etc.; but that it is necessary at last to adjust everything to suit the needs of the real normal individual, with all the many variations in which he appears — never being repeated again, and adjustment and approximation never being completed or ended.

The following lines are therefore thought to be profitable and practicable in a normal school:

1. Analogically — the extensive — the training of the ability to institute comparisons and make classifications which will involve the variations and similarities that he constantly encounters in the investigations he must daily conduct in the carrying on of his work as a teacher.

2. Analogically — the intensive — as regards comparisons of a child's development and modification in his own career, such as are consequences of the results of advancing age, experience, and training. By this means a teacher is prepared to anticipate the changes that must occur, and welcome the need to adapt his management and instruction to the expanding human career in every direction that is occurring. This is necessary to make the teacher fully acceptable to the demands.

3. Genetically — as to recent and remote heredity, showing the good and bad conditions that give promise or that may indicate hindrance. Heredity is a factor, but not a permanent one, as latent conditions do not need to be developed, and can be retarded and dwarfed by proper care, culture, and management. Such a knowledge is not the acceptance of fatalism, but is a guide to the proper nurture and protection that will bless and save and sanctify.

Indications are interpretations of the possible and the probable, not of the necessary or the absolute.

The normal child is the rule, not the exception, but he is not the so-called average child. The phenomena that we commonly classify among the abnormal and the hereditarily unfit are generally types of the incomplete, of the immature, of the undeveloped, rather than of the irregular, the unfortunate, or the unfit.

The normal child is possessed of the moderateness of the mediocre, not the extravagance of extra brightness, of unusual ability to respond, of largeness of gifts and talents in acquirement. These much-lauded phenomena, ranked as greatest and best by the schools and the teachers, are evidences of abnormal status and prospects rather than of the best and most hopeful.

The exceptional, the eccentric, as well as the defective, must be recognized; but they are the few rather than the many, and school work deals with the normal and the ordinary, and it is for those that the studies of the normal school must prepare. Such a personality is not perfect, not complete, not trained, not good in judgment, not skilled in anything, not effective in planning — as he is needing all that education and civilization can do for him and his career.

4. There should be a study of (1) normal inhibition; (2) movement; (3) imitation; (4) emotional life; (5) impressionability; (6) simple and complex action; etc., etc.

Attention should also be given to a full knowledge of the field opened for study in the applications of the gift of language. This has probably the largest field of actual usefulness to these ages and grades of teaching.

The development of the individual in speaking, writing, acting, etc., to convey his thoughts, and in the training necessary to attain the acquisition of these elements of power, is among the most important in pedagogy. Even a partial knowledge in these directions will enable the teacher to avoid many mistakes, while a complete and careful knowledge of these fundamental elements will always guarantee efficiency and skill, if good judgment is used in adapting the teaching to the pupils.

It is very essential also to recognize the effect of the spirit of the school and the teacher upon the work of the pupils. The pupil is always subject to misunderstandings, misinterpretings, false conceptions, deceptive indications, teacher's accusations—all of which interfere with happiness, prosperity, and success. Fundamentals of happiness, the conditions that make such experience possible — as it comes from indirection — are among the essentials that cannot well be omitted, as the power to touch the emotions and the sentiments is a power that can be used for the greatest good or the greatest evil.

5. Each child is an individual problem — the sole edition of his kind, having his own province to fulfill, his own career to work out, his own message to give, his own service to humanity to perform. Hence his problems, his difficulties, and his perplexities are always to be considered and thoughtfully assisted toward a solution as far as the teacher's knowledge and experience can contribute.

Psychology and child study has limitations, and very definite ones at that. It is no substitute for judgment and common-sense. It is rather an assistant than a guide, even to common-sense. It will help one to interpret, but it is not an interpreter, as that is the teacher's own work.

Its greatest effectiveness is found in the vital side of affairs, not in the formal side. Life is not a classification, but a unity. The mind is not a lot of faculties working at variance, but in co-operation. Its study must not end in analysis, but in synthesis.

PRESIDENT ALBERT SALISBURY, State Normal School, Whitewater, Wis.—We teach one course orally and one in the text-book. We have tried nine different books, and then we have returned to some of them a second time and have again discarded. We are not able to recommend any particular book. We cannot find a place for child study except as a part of psychology. There seems to me something unwholesome about carrying this subject to the extent of sentimentality.

PRESIDENT LIVINGSTON C. LORD, Eastern Illinois Normal School, Charleston, Ill.—It seems to me that the study of psychology in the normal school should result in some culture, how much I do not know. If the normal school stands for the cultural side of psychology, it could get some grasp of that subject in the study of Shakespeare, Thackeray, George Eliot, Hawthorne. There is a knowledge of the mind which is valuable to the teacher, and this is something more than merely a knowledge of human nature which makes for a teacher's success. The knowledge of mind set forth by great writers is the knowledge to which I now refer as valuable. The mass of knowledge possessed by a student coming to me is greater than all I can add; the teacher does a great service by arranging for the student knowledge already in his possession.

The cultivation of the power of attention is important. Interest is the result of attention. Memory, including imagination, of course, ought to be given very high place. So many people talk about cultivating higher faculties, forgetting that the lower faculties must furnish the matter. A man cannot remember what he has not clearly sensed.

Principal James M. Green, State Normal School, Trenton, N. J.—The highest culture that I know about is the culture that comes from the mastery of subjects. When you talk to me about a cultured man, I want to see a man who knows his subject; if it is physics, I want him to know physics; if it is mathematics, I want him to know that. When it comes to the normal school, we must be practical. We are directly in contact with the taxpayers. We want to help the one who goes out into the schools. We want to send out teachers who can give a knowledge of these branches in the best and quickest way. The psychology we want is to help in that direction.

I have noticed. in my work as superintendent and as principal, certain very marked faults. There is the teaching of symbols that do not symbolize anything. I have seen college graduates in a primary grade trying sentences which convey no impression to the mind of the child similar to that in the mind of the teacher, and the teacher did not know how to test the child to see whether he was getting the idea. In other words, it seems to me that the art of making an impression must be studied.

Some years ago it was decided in a city in our region that we do not do enough object-teaching. I think Oswego was working in that line. In the school referred to, a certain number of objects—blocks, etc.—were purchased, and the teacher was required for six months to teach from these, and pretty generally they became blockheads. There was no knowledge on the part of the teachers of the things to be symbolized. It seems to me that the normal teacher must know psychology to give force to symbols. I have known of certain schools that decided that the proper way to teach spelling was by writing; no oral teaching whatever. They made no test to see whether something was gained thru the ear.

Not a great while ago there came into our section of country the theory that we must teach the spiral system in arithmetic. We must select from the higher subjects what was simple, and teach it in the lower. The pupil would leave school before reaching the subject, and the spiral system was so worked out that not enough time was given you to make an impression that would endure. There were so many impressions made that none were deep enough to be lasting. It was not very long before very severe criticism came upon that school; the bankers and merchants knew that their boys could not work arithmetic. The banker's children had spent more time on arithmetic than the father ever had, but it was scattered.

I wish to close with this statement: that I think the psychology we are to study must show us the habit of the mind in learning. I do not ignore that physiological psychology which teaches us to know what it means to be tired, the study of a sort of phenomenon psychology. For the normal schools, in our field of labor, we must remember that we come in contact with the children of all classes, and we must teach that psychology which will most help the children.

John A. H. Keith, of Northern Illinois Normal School, De Kalb, Ill., was asked to state President Cook's point of view on this subject.—I am reluctant to attempt this, because I have not heard the discussion. The teacher who is to study psychology should get out of it the knowledge of the process. She should be prepared to give the children the conditions for learning. We believe that the teacher should learn how the child utilizes the things which he gets by his senses. She should get this from the child's point of view. The child-mind changes gradually from image-making to the more abstract processes. We are making less rigorous use of terms, and there is less of division between some of the terms used in psychology. The making of definitions so exact is not true to the reality. One-fourth of our work centers around these two topics, attention and interest. We are also paying more attention than formerly to the agencies of the child's emotions. We believe that his interest depends on his attitude toward things. We pay considerable attention to the study of the genesis of the child's emotions in the formation of habit, also to how the child's experiences are shaped to form the self of the child, which is not a fixed but a changing personality. This is the important thing to be reached in the teaching process. It all centers around this principle—that the teacher should learn how the child-mind acts, rather than judge by the adult's consciousness.

TOPIC II: SHALL THE INSTRUCTION IN PSYCHOLOGY BE ORAL, OR SHALL A TEXT-BOOK BE USED?

DISCUSSION

Grant Karr, superintendent of practice, State Normal School, Oswego, N. Y.—The question whether the text-book shall be used, or oral instruction, is a very large question, and what is applicable to other studies is applicable to psychology. It seems to me best to note briefly what method is. Method is usually considered simply a means of conveying knowledge. I do not believe in that notion of method. Mind is a thing that makes itself, and method is some sort of a procedure that takes into account this self-activity. Otherwise the teacher must be a sort of divinity that creates. The teachers who hold the theory of total depravity, and who aim to put into the minds of children ideas that are not now there, must have some such theory of method. Method is simply an environment. A mechanic is not a person who creates natural forces, but one who environs natural forces; no person creates electricity; the farmer does not create the forces that grow the grain. All the process that the teacher goes thru with might well be called method. Taking that view of it, there are four or five different varieties of method.

The first, most common and easiest, is the oral method; another is the method of presenting the book; another is that of experiment; another is that method of development which results from discussion. The text-book method is perhaps not the best method, and it cannot be used wholly and solely. The teacher has to know the individual. To present the book first is unduly hastening the matter. I do not think that the text-book, however good it may be, can ever replace the teacher. As a general thing, the book will be better than any outline that the teacher can construct. The author is usually a specialist. The person who teaches psychology must be a master of his subject; he is the one who is expected to interpret the subject.

There are decided advantages in using a text-book; the subject is well outlined; the book is gotten up in good form, is more easily read than notes, and is permanent. The book will shut up when you get tired of it. The disadvantages are those which pertain to books in general—the chance to memorize, so that the pupils may recite without having ideas. Again, they may get the idea that the whole subject of psychology is in a book, and only one book. If they read many books, they may get confused because of conflicting opinions.

To sum up: In the teaching of psychology both the text-book and the oral methods are valuable. To do without oral instruction does away with the teacher; correspondence instruction would be very unsatisfactory. Whether the oral instruction shall precede and the reading come after, depends on the teacher's view and his previous training. If he has a broad view, he can outline his course and put his work thru orally, and lead each student to make his own summary; but the student may get to think that writing notes is studying psychology. If they are to read books at all, they should know what conflicts they are to find.

I would, therefore, recommend that both the oral and the text-book methods be used, the text-book, as a general thing, to follow oral instruction.

Thomas H. Gentle, director of training school, State Normal School, Platteville, Wis.—My work lies just between the children, on the one hand, and the teachers, on the other. In many of our normal schools there are two courses in psychology — the elementary and the advanced. I think the advanced course has not much bearing on the work of the teacher in the training courses.

The instructor in elementary psychology would better select a few principles which he thinks of value, and use children to illustrate the principles. Let the students take notes of what is done. After two or three such recitations have been held, let the students meet the instructor and hold a discussion. More lessons may then be given, putting these principles into application. After thus bringing out the principles, let the pupils go to the library and read on method rather than on psychology. I do not mean to crowd out the text-book; I think the teacher should have the text-book close to him. Teachers are likely to throw away psychological training, and fall back on tradition. If the student-teacher gets his psychological data from seeing it applied, he will see how his theory fits the pupils.

CONFERENCE B.—TRAINING TEACHERS

TOPIC: CRITICISM — WHAT SHALL IT BE?

INTRODUCTORY ADDRESS, JAMES E. RUSSELL, DEAN OF TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK

[AN ABSTRACT]

We take for granted this afternoon that teachers can be trained for their work. The problem before us is how best to assist the young teacher in acquiring the skill which makes for success in class instruction. Or, from another point of view, how shall the young teacher acquire those habits in class work which will leave him free to exert personal influence upon his pupils?

Teaching is an art, and, like other arts, certain habits must be acquired in order to achieve the greatest success. Some light, it seems to me, can be had from the analogy of the ordinary workman. When an artisan is asked to make an object — for example, the columns in this room — we must supply him with material. In this instance the material is a hard wood. We must then give him the instruments which he requires and the means for carrying on his work — in this instance, tools for working in wood and a suitable workshop. We must then provide him with a plan, showing the elevation and giving the details required in the execution. If he is able to improve upon the plans given him, or to form his own plans in such a way as to meet our requirements and arouse our admiration, we no longer call the workman an artisan; he then becomes the artist.

It is possible, however, for a man to invent very elaborate plans, to have the best of tools and instruments, and to be provided with an abundance of choice material, and still be unable to do the work required. He must have skill in the use of tools which are adapted for work upon the material, if he would shape this material in conformity with the ends to be obtained. How does the workman acquire this skill? If we applied this analogy to the work of the teacher, the material which is supplied is the pupil, the means and instruments are the subjects of instruction and all the school equipment which are essential in education. The ends to be attained are suggested by the study of the history and philosophy of education, and by the requirements of modern life. The skill which is looked for in the teacher comes from experience in doing the work of the teacher.

The teacher who works blindly and who uses the means and instruments of instruction thoughtlessly, or who is incapable of giving a personal touch to all that he does, is an artisan, not an artist.

In the work of our normal schools we hope to make every student somewhat of an artist, but it should be borne in mind that artistic qualities are dependent upon clearness of vision and strength of intellect. In the training of the teacher, therefore, due allowance must be made for these qualities. The person who has no considerable grasp upon either the ends of education or the means of instruction must approximate in his training the training of the artisan. The normal school that has to do with students without elementary training ought not to pursue the same methods as the normal school which deals with students of higher academic attainments. The difference, however, consists mainly in the amount of drill required in fixing the necessary habits.

Every workman, whether artisan or artist, must know the nature of the material with which he is dealing. Both alike must have some idea of what is to be accomplished. The knowledge of these two factors will determine what instruments and means must be employed in the work. The study of the child and of the society of which the child is a part, of psychology, sociology, of the history and principles of education, may be expected to give a better knowledge of the pupil and of his possibilities, and a clearer understanding of what is worth working for in education. This knowledge, coupled with an understanding of the requirements of the life which the pupil ought eventually to lead, must determine the nature of the influences which can be brought to bear upon the pupil. Important among these influences are the subjects of instruction in our schools and the manifold activities of school life. These are the teacher's tools. Of course, all teachers must know the subjects which they teach.

But how about the skill which is required in adapting the means to the material and in doing the work in such a manner as to attain the desired results? If the apprentice be ignorant, relatively speaking, we put him under a master-workman; and that master-workman will show him what he is to do. He will teach him how to use the instruments; if necessary, he will guide his hand in doing what he is told to do, and he will keep him at it until the habit is fixed. In other words, the apprentice is (1) given to understand what he is to do, (2) shown how to do it, and (3) compelled to perform the action until satisfactory results are obtained.

With a higher degree of intelligence the workman can be taught something of the quality and strength of materials, of the laws of mechanics, physics, and chemistry, and of other subjects which have a bearing upon his work. The man who is well trained in mechanical engineering may be unable to make the simplest implement or bit of machinery used in his profession; but it is safe to say that, if such a man is thoroly anxious to perfect himself in any mechanical art, he will not only acquire the skill more quickly than a more ignorant workman, but he will always be the better prepared to improve upon his art. So it is in the training of teachers — an important consideration is the degree of intellectual strength which we have a right to expect of the pupil-teacher. If he is weak intellectually and the period of special training is short, it is impossible to get very far away from the apprentice's method. He must be told what to do, shown how to do it, and keep doing it until desirable habits are fixed.

Of course, we expect in the teacher — certainly in the teacher with normal-school training — something more than we find in the artisan; hence, the normal school does something more than instruct in methods and give practice in teaching. But whether the pupil-teacher be strong or weak, the skill which he acquires in teaching must come from experience under proper direction.

The topic for our discussion this afternoon, as I understand it, is: What shall be the nature of this direction? Taking into account what the pupil-teacher brings from his other instructors in a normal school, what further directions should be given for teaching, and how can that teaching be improved thru criticism?

I think we ought to realize that criticism is not picking and nagging pupil-teachers. It does not consist in telling them that this way is right and that wrong. There must be criticism both affirmative and negative, which must be categorically stated. But criticism, as we understand it, must be constructive.

I have attempted to outline some of the most important matters which may properly be considered under this head. I put them before you for your consideration this afternoon. They are as follows:

1. General aims of criticism: (*a*) to illustrate and apply theory; (*b*) to detect mannerisms and to check bad habits and practice; (*c*) to secure acceptable methods of teaching.

2. Special objects of criticism: (*a*) teacher's personal appearance, dress, etc.; (*b*) use of language, voice, etc.; (*c*) appreciation of personal peculiarities and needs of pupils in class; (*d*) knowledge of subject-matter to be taught; (*e*) selection and arrangement of materials of instruction; lesson plans; (*f*) methods of instruction; reviews; presentation of new facts; summing up; fixing lesson by drill and application; (*g*) securing attention and interest; use of subject-matter; art of questioning; discipline; (*h*) personal influence of teacher upon pupils.

3. Persons to give criticism: (*a*) instructors in psychology and general methods; (*b*) instructors in academic subjects; (*c*) special critic-teachers.

DISCUSSION

PRESIDENT J. N. WILKINSON, State Normal School, Emporia, Kan.— President Wilkinson said that he would make no attempt to cover the points given in the outline in the program. It had been well prepared and gave valuable suggestions in every item. It might be worth while to add as a general purpose of criticism the fixing of good habits in teaching. It is not enough to know that the student-teacher has done a little good work. A small sample, however good it may be, does not assure the excellence of the whole future product. The student-teacher, nerved up to a special effort or a few special efforts, may drop to a much lower standard unless this excellent teaching becomes a fixed habit. This consideration would suggest that a student-teacher who has already had some years of experience may need to do more work under criticism, in order to overcome bad habits and form good ones, than would a student-teacher who has never formed any bad habits in teaching.

There must be such formation of habits in the line of scientific teaching as will make the teacher safe to do at once the thing that is philosophically correct without pausing to reflect. The teacher who must reason out the method for each new case cannot move swiftly enough to meet the new emergencies as they arise. The best theoretical preparation that can be given will not prepare for dealing with the peculiarities of individual pupils. The illustration that the master of a trade must understand his material does not indicate the power that the teacher must acquire. His material could never be brought to uniform excellence, nor can anyone tell in advance how the pupil will behave under any given conditions. The teacher must acquire a sufficient surplus, a sufficient reserve power, to enable him to meet firmly any emergency that may arise. The student-teacher needs criticism and help until he has fixed good habits, so that it is easier to do good teaching than poor teaching.

GUY E. MAXWELL, superintendent of training department, State Normal School, Winona, Minn.—For the purposes of this discussion the elements of teaching skill may be thought of as of three kinds: (1) The mechanics of the schoolroom; for example, the passing of material, the seating of pupils, the regulation of temperature, and the like. These things are easily open to direction or change thru criticism. (2) What we may call the technics of teaching, which has to do with questioning, lesson plans, method of instruction, and so forth. These things are also open to change and direction thru suggestion and criticism, tho they are much less objective than the first kind, and thus less easily influenced by the critic. (3) Lastly, there is the vital phase of the art, dependent upon the subtle power of personality, and having to do with such things as the interpretation of the child's mental states, the knowing what to do next, and the like. This element springs from the teacher's inner self, and is pretty largely born in him. It is open to change only thru slow growth and thru the most skillful suggestions. Having the last of these three phases of teaching skill, tho without the other two, few teachers have been known to fail.

Having the first two without the last, few have been known to succeed. In what I shall have to say I shall have in mind the third phase of the art only.

One part of this vital element in teaching is spontaneity or naturalness, the giving forth of one's best effort with entire lack of self-consciousness. Criticism, it seems to me, should be influenced constantly by the necessity of preserving this life-element. The best part of teaching is so fully a spiritual process, is so fully dependent upon the subtle intercourse of mind with mind, that conscious efforts at following externals, devices, or imposed directions may easily destroy this delicate relationship. Overmuch criticism is like overmuch pruning. Pruning is a necessary process in the symmetrical development of a tree, but the pruning should be pretty fully governed by the vigor of growth, for it is more largely an incident in the tree's growth than a cause of it.

In the first place, then, criticism should be in the large. Aims should be emphasized, results carefully examined, and the general tendencies of the work studied and directed. Just as in reading we desire to take the child's mind away from himself, and instead of saying to him, "You're reading with too little force," or even saying, "Read more distinctly," we prefer to say, "Read so we may all hear," so whenever possible the *aim* to be reached should be made the objective point. The student's attitude, then, is not so much a matter of inhibition, or even self-exertion, as a desire to reach a clearly defined aim in the best way that the personality and temperament of the student may suggest or make possible. If we say to a student teacher, "Make these pupils more fully appreciate this lesson," he does not need to think so much wherein he is failing as to think whereby he may reach this end. If we direct the teacher's mind to the object sought, then gesticulation, facial expression, forceful illustration, or what not, will result in terms of the teacher's own personality.

Again, critics should permit much latitude in the planning of subject wholes, while holding the teacher responsible for results, and for a statement of the principles upon which his practice is based. There is a temptation to permit, or to encourage, student-teachers to work by the day; to be related to the critic as the laborer to his foreman, or the apprentice to his master. When this is true, no large grasp of the work is secured, no rational and self-directed efforts are put forth, and at the end any success is due to the skill of the critic, and not to that of the student. I believe that some student-teachers are over-criticised, and that passivity rather than activity is their resulting attitude. The "inverse Socratic" method should largely obtain, that in which the pupil comes to the critic with questions, having found his own difficulties, or at least having doubted his success. Too often the prospective teacher's attitude is: "Well, here I am, ready to be made into a teacher. What criticisms have you to offer?" This shows that the cart has been put before the horse, and that the critic may have helped to put it there. The student must pretty largely work out his own salvation, else he is not saved. Patience is the virtue on the critic's part that permits the learner to get the victory for himself, while too much criticism steals, not only the victory, but the possibility of it.

Again, we ought to avoid the harsh criticism of minor errors and personal idiosyncrasies which cannot be changed because too deeply rooted. The criticism of these things should be made in constant reference to their subordination to fundamentals. The perfect sympathy between teacher and student should not be jeopardized by leaving to the critic the work of reforming his "personal appearance, dress, etc.," or the "use of language, voice, etc.," as noted in the outline. The teacher of academic subjects in the normal department should attend to these faults before the student-teacher ever comes to the children. Moreover, the fact that these things are matters of habit, and are changed only thru long effort, is an additional reason why their correction should be begun early in the course, and not left until near the end.

The critic's attitude of mind is to be that of full sympathy with the student-teacher. To make the work sympathetic it must be mutually helpful. There should be mutual growth on the part of the critic and pupil. They should together talk over the work in the light of general aims, principles, and results, and not so much in the light of the critic's personal methods, which of course are individual. Thus criticism has a social rather than an individual aim, and is sympathetic rather than antipathetic. In other words, tho intellectual progress may be made when the teacher is not closely in touch with the inner life of the pupil, when one is teaching a fine art, where personality rather than intellect is to be influenced, the union of mind must be perfect.

Joseph Landon summarizes the matter in these words:

> It is the critic's business to put himself in harmony with the work, and to mentally adjust himself to the teacher's condition. He has to interpret as well as appraise, to see deeply, to expound clearly, and to judge justly and intelligently. Sympathy with the work is essential. Good criticism is not intolerant, and is simply neither praise nor blame; it is broader and more helpful than opinion alone, no matter how correct. It is an intense illumination of the inner and finer qualities of the work, a full recognition of its spirit and purpose, and an accurate display of its meaning and value.

Finally, then, the mechanics of teaching is open to instruction, the technic of teaching is open to illumination, but the spirit of teaching is open to inspiration.

Miss Sarah J. Walter, principal of training department, State Normal School, Willimantic, Conn.— It is important, first, to determine what is meant by criticism from a training teacher's point of view. To one group of teachers it means one thing, and quite a different thing to another group. It may mean individual and personal talks concerning errors in daily teaching; or conferences held for the purpose of discussing class-room problems; or general talks upon discipline and pedagogy.

Criticism should be the expression of judgment, based upon pedagogical principles, on the teaching work, and on the effect of this teaching upon the activities of the child. The general motive or aim of criticism should be to surround the individual preparing for the work of teaching with such influences as shall help him to form and accept ideals, and, further, to enable him to become self-directive in the realization of these ideals.

All criticism should be constructive and never destructive. Nothing so discourages a young teacher and tends to make her pessimistic as to receive criticisms which dwell unduly upon her faults. It is more helpful for the critic to point out the better way and to encourage the teacher to attain that. The model — the ideal, and not the defect — should be constantly before the worker.

Criticism should demand active self-direction on the part of the student-teacher, and should not leave a way open for imitation. Thus only can the individuality of the teacher be preserved. No branch of educational work demands such rare qualifications as the work of the training teacher.

Criticisms of teaching work should follow soon after the exercise itself, that the memory of each feature may be fresh. This criticism should always leave the student at the close of the discussion stronger and more hopeful than he was at the opening. All personal criticism should be given in private, and this should be searching, honest, friendly, tho sometimes severe.

One of the most important duties of a critic-teacher is to maintain such a standard in practice as to prevent weak or immature students, especially those who have not shown strong professional tendencies, from going out as teachers. The true test of criticism in a normal school is the work of the graduate after he has left school.

Principal Theodore B. Noss, State Normal School, Pa.— I think it unfortunate that we have certain words in our educational vocabulary. I think there is no place for the word "criticism." It was common, years ago, to have a feeling of antagonism between the training teacher and the student-teacher. We are much helped by criticism, if it is given in a kindly spirit. The training teacher who does not submit herself to the same test that the student-teachers have to submit to is not doing the right kind of work.

Professor F. G. Blair, of the Eastern Illinois Normal School.— I admire Mr. Maxwell's clear presentation, but I think the tendency is to withhold frank criticism. I know that after a night of tossing, because of criticism by a person now in this room, I came back the next day resolved to succeed.

Mr. Wilkinson has suggested that a student-teacher must learn to stand on his own feet and must not be an imitator. The student-teacher must see good teaching. I am not afraid of imitation. We must lead them to see a few things, that they may see more. I rather think that this point should be added, that the teacher must be brought to feel his weakness.

President Z. X. Snyder, State Normal School, Greeley, Colo.—There are three relations to be considered: First, the relation of the normal department to the training school. There must be a sympathetic, intelligent interrelation of these two departments. The training school is the center of interest. Second, each department should know the work of the other. Third, it is important that they know that they are doing the same work. There is no place in a normal school for an academic department which does not realize itself in the training school. When I find schools where the heads of the departments disparage the work of the training school, I am sure the condition is bad. To the practitioner in the training school I would say: Keep your mouth shut, seek criticism, love the children.

Professor Edwin C. Page, of Northern Illinois Normal School, De Kalb, Ill.—Mr. Noss has suggested what I should like to speak of particularly. We recognize the danger to the student-teacher of criticism, which should always be so given as to make student-teachers critics of themselves. At our institution members of the faculty teach model lessons twice a week, teaching in the model school. In the following discussion our student-teachers are expected to criticise the conduct of that recitation. The result is, first, that it conveys to those student-teachers the true ideal of criticism. In the second place, the student learns correct methods of criticism by criticising his instructor, and gains at the same time ability to criticise his own teaching. One great benefit is the effect on the faculty. Every member is certain to be careful in planning and conducting his lesson, if it is to be criticised by the student-teachers. He has to deal with the very questions with which his student-teachers deal. The plan is beneficial from every standpoint, as we see it, and we have tried it three years.

Dr. Frank M. McMurry, professor of theory and practice of teaching, Teachers College, Columbia University, New York.—If we eliminate the personal element in criticism, we must give full reason for the fault we point out. We should avoid giving the student-teacher the feeling of being deluged with criticism. Good criticisms, in general, are subject to the same principles as recitations. Any recitation should leave the child feeling that only one, two, or three points are talked about. No matter how many criticisms we have to offer, we should reduce them to two or three points. The critic-teacher may point out every fault, and by this means absolutely check the growth of the student-teacher.

John H. Glotfelter, principal of training department, State Normal School, Emporia, Kan.—It seems to me the function of the critic-teacher is primarily to see that the practice-teacher has an ideal; secondarily, to review the result of the effort. That will take away from the teacher, perhaps, the feeling that he is under criticism, and will give him that bearing which he cannot have if self-conscious all the time. The result of this will be an interview with the teacher, which may be either of two kinds—one purpose to show the teacher how near he came to hitting the ideal, the other to show how far he missed the ideal. That leads to looking at the fault as rather an impersonal thing. Perhaps you will say that this is ignoring good form in teaching. Perhaps that may come in as a secondary matter; the vital thing is to get at results.

President Livingston C. Lord, Northern Illinois Normal School, Charleston, Ill., suggested that too much is being said about making criticism mild and pleasant, and this raises the question whether dogmatic statement is not an element of necessity in life. There is such a thing as wasting time in attempting to soften criticism. The person should not be chloroformed when criticised. Sweetness is a good thing, but sometimes in this criticism there is more sweetness than light.

PROFESSOR N. A. HARVEY, of the Chicago Normal School.— Criticism should always be generic rather than specific. We have here a list of possible faults that practice, teachers are subject to. These possible faults are, in general, symptoms of disease. Some of these faults refer to character. One of the worst possible criticisms is that the character is weak or colorless.

DEAN RUSSELL closed the discussion, saying that if the teacher did not have an infinitely more complex material than the ordinary builder, his task would, as Mr. Wilkinson suggests, be much easier than it is. It has been said that criticism must cause discomfort to the person criticised. If criticism leads to discouragement, it is bad. Criticism may give temporary pain, but ultimate improvement. I cannot close this conference without suggesting that the self-criticism which has been commended must lead to efforts for improvement. I know no better plan for self-criticism than careful work by the critic-teacher with the pupil-teacher.

PROGRESS OF EDUCATION IN PORTO RICO

MARTIN G. BRUMBAUGH, COMMISSIONER OF EDUCATION FOR PORTO RICO

[AN ABSTRACT]

When the smoke of the Spanish-American war lifted from the islands of the sea, our government found itself in possession of new territory and new problems. Among these new acquisitions the most interesting and the most hopeful is Porto Rico. The people of the island not only did not oppose, but they joyously welcomed American occupation. When, therefore, we took the island under our protective care and began to study it, we found an island approximately one hundred miles long and forty miles wide, lying at the gateway to the new canal, and containing about 3,600 square miles. Along the coast is a level alluvial plain rich in sugar estates. The interior rises abruptly to an altitude of almost four thousand feet at the peak "El Yunca," and upon the slopes of these mountains grows an excellent quality of coffee. In the rich inland valleys, caused by the rushing torrents, grows tobacco. Coffee, sugar, and tobacco are the chief productions of the soil. Tropical fruits grow wild and in great profusion. Hat-making and lace-work are also significant hand industries. Upon this area are crowded almost one million human beings — 28 per cent. being of the black race, and about 90 per cent. of the remainder poor whites with some admixture of old Borenquin Indian blood, and the remainder the rich landlords and professional men. These latter, being for the most part pure Spaniards, were the only element who at any time gave the American government any concern or opposition. Eighty-eight per cent. of the population was illiterate.

By an act of the Congress of the United States civil government was established in the island May 1, 1900. It was the first attempt of this government to establish a colonial policy, and its results were destined to be far-reaching, because it not only involved the destiny of the people of the island, but also as an experiment it was destined to become a precedent for government in all our other possessions.

By the terms of this act the executive function of the government was vested in a governor and a cabinet of six Americans, all appointed by the president of the United States. This cabinet, with five natives similarly appointed, is the executive council or senate, and the people choose a house of delegates consisting of thirty-five members. These two bodies constitute the legislative function of the government. The judicial functions rest in sixty-seven police judges, five district courts, and one supreme court. All these judicial positions are appointive. The governor appoints all save the highest court; its five members are named by the president.

Without precedent in the annals of our nation, this civil government began its arduous duties and gradually gained the sympathy and later the full support of almost the entire population. Spain in four hundred years had not erected one schoolhouse in the island. The one erected by the United States military government was destroyed by fire July 1, 1900, and civil government faced a population of one million souls without one building at its disposal that was constructed for school purposes. In the meantime the schools had taken a prominent place in the uplift of the people. Under military rule, 612 schools were opened and about 23,000 pupils were enrolled. Under civil government, the first year, $400,000 was set aside for schools, and 800 schools, with 36,000 pupils, were opened and maintained for nine months. During the second year, 1901–02, $501,000 was appropriated by the local legislature, and now 1,000 schools, with 50,000 pupils, are in operation. Illiteracy has been lessened by ten per cent. and the demand for schools is steadily growing. In fact, were we able to pay the salaries of the teachers and had we the teachers in sufficient number, we could now have at least 150,000 pupils in the schools. The average monthly attendance in 1900–01 was 75 per cent., being 1 per cent. more than Pennsylvania in 1898, and only 1 per cent. less than Massachusetts in the same year.

The funds for the maintenance of the government are derived from three sources: from tax upon property, $500,000; from internal revenues, $750,000; and from import duties, $750,000. These sums were estimated, and in each case the income has exceeded the estimates. The credit for this healthy financial condition is due to Dr. Hollander, our treasurer, and Porto Rico today does not owe one dollar, and has over $1,000,000 in the treasury. The island has not cost the United States one cent. This splendid financial condition is perhaps without a parallel in the history of Spanish-American countries.

The school system has become the pride and the hope of the people. When additional schools are to be opened, our only difficulty is the lack of teachers. To overcome this a normal school at Rio Piedras has been established. This school is the survival of a farcical school at Fajardo and the outgrowth of the summer school at San Juan. When it was proposed that a ten-weeks' summer training school should be opened during vacation, it was freely asserted by prudent advisers that not more than one hundred pupils could be secured, owing to the poverty of the teachers. A circular was issued explaining the school and appealing to the young men and women of the island. When the school opened July 14, 1901, we had 806 pupils. It was the most magnificent indorsement of the system. At the end of ten weeks these young men and women asked the commissioner to set half the questions for a teacher's certificate in the English language. In fact, English is a common language in the island today. Some English is taught in all the schools. Everywhere the children speak it, and many parents attend night schools to acquire it. All the national songs of America are sung in the English language.

Porto Rico had not one public schoolhouse until civil government was established. One structure for school purposes was erected by the military government. Fire destroyed it July 1, 1900. Two hundred thousand dollars was given the commissioner to begin the work of erecting schoolhouses in Porto Rico. Today there are forty-six first-class American schoolhouses, some of ten, six, four, and two rooms, and some are one-room agricultural schools. Each building stands on a large campus, usually of one acre, and the agricultural scholars cultivate the soil one-half of each school day. Over 1,200 pupils are thus receiving systematic, practical agricultural education. These buildings all carry the names of prominent Americans, as "Washington School," "Lincoln School," "Penn School," "Jefferson School, "McKinley School," "Irving School," "Horace Mann School," etc. The American flag flies over every school while it is in session. The patriotism of these people is equal to that of our most advanced communities.

A young man came forty miles afoot to the summer normal school, slept on a bare floor, begged his food, and studied so diligently that he received a rural certificate, and is now teaching in a shack schoolhouse under the palms on the mountain side. A boy in a school at Juncos had only the front of a shirt and trousers to cover his naked body. He preferred coming to school half-clothed to growing up in ignorance. In a mountain school Mr. Wood, one of our supervisors, found a boy wearing his father's shirt, because the boy's shirt (the only one he had) was being washed. The father's shirt bore on its back the legend "Pillsbury's XXX." In the little coast town of Loiza the laborers in the cane-fields and the poor laborers in the streets are attending a night school. There is not a lamp in the town. These men bring candles, and in groups of three cluster around the candles and patiently spell out the beginnings of an education. The Porto Rican is anxious to learn. He can learn.

The ambition of these people is to acquire a knowledge of American institutions, and thus hasten the day when the star of the island of the sea shall nestle in the folds of the flag they with us so fondly love. They have accepted the lesson a republic needs ever to impress: that the door of the public school is the door to statehood in the federal union.

Finally and briefly then, with a system of elementary schools thoroly organized and in full operation; with the new school law, prepared by the commissioner and enacted by the insular legislature, in full force and effect; with efficient supervision provided; with new school buildings in all towns and cities and in many rural places in daily use; with systematic agricultural education; with a thoroly reorganized corps of teachers; with a summer institute happily ended; with a normal-school building at a cost of $40,000 completed and the normal school in successful operation; with a model high school in San Juan; with the annual budget for schools gaining annually from $400,000 to $500,000, and now to $600,000; with over 250 chosen pupils in schools in the states; with $100,000 donated for a library in San Juan by Hon. Andrew Carnegie and a foundation of 8,000 volumes already in daily use; with a first-class departmental pedagogical library; with all the schools thoroly equipped with free books and supplies; with a nine-months' term in all the schools; with an average salary of over $40 per month; with local school boards chosen by the people and managing the material phases of education; and with a rapidly growing sentiment in favor of free, popular education — it is eminently fair to claim that education in Porto Rico has made, and will continue to make, most satisfactory progress.

ALTRUISM AS A LAW OF EDUCATION

ARNOLD TOMPKINS, PRINCIPAL OF CHICAGO NORMAL SCHOOL, CHICAGO, ILL.

Altruism and egoism are not antagonistic, as often implied in current speech, but are complementary aspects of the same truth. It would be as easy to affirm that egoism is the law of education as to affirm that altruism is such a law.

In fact, it is easy to make it appear that egoism is the supreme law of education, for man's whole duty is to realize his possibilities. No criticism can be made on the conduct of a man who devotes the whole energy of his being to realizing within himself all the beauty and worth of human nature possible to him.

Yet, in seeking the highest good of self, man must forget himself in some disinterested objective good. Man may conceive for himself a high ideal of personal qualities, but in the process of realizing these he himself, as having these qualities, must pass out of thought in the process of securing them. For instance, an individual may set up for himself as an ideal the attainment of a higher form of charity than he is now living up to; and, if in pursuance of this aim, he should take some gift to the needy, and be saying to himself all the time, "Now, this is good for me, for I am growing in charity," he would not be growing in charity, but in selfishness. He must lose his life in the other in order to find it there. No man ever rose in moral character or attained unto eloquent speech except thru self-forgetfulness in some disinterested objective good. In fact, genius itself is only the power of self-forgetfulness. The lives of great men, such as Lincoln or Herbert Spencer, are characterized by this power of losing the self in a great problem of life and thought.

I use altruism in the broadest sense of losing the life in any object or problem, whether persons or things, animate or inanimate. The most striking instance of altruism is that of the love of the parent for the child. In this case the parent does completely lose himself or herself for the child. The only test of love is that of complete preference of the other to the self. The history of the human race is marked by the increasing power of the individual to feel kinship with another. As history has progressed, middle walls of partition have been broken down, and man more and more becomes sensitive to the life of another, whether of different blood, race, or country.

But man has feeling of kinship with animals as well as with persons. Lincoln, on his way to a trial, passed by a wounded bird thrown from its nest, but he was so uncomfortable that he returned and placed it in its nest again. This was as true an act of altruism as John Howard performed in the prisons of England. Macaulay says that at an early period in the history of London horses were driven into that city, jaded, abused, and galled; but that at a later period such treatment was prohibited by law. This was a clear case of growth in altruistic sentiment. There has been a marvelous change in farmers' treatment of their stock. While this may have been prompted by economic reasons, it certainly could be justified on the score of sympathy for dumb animals. Man waters a withering plant by the same kind of sympathy as he extends a cup of water to the famishing soldier on the battlefield. The story goes that Charney, the prisoner, bent over the little flower that grew up between the stones in the prison yard and received the hail on his own back to protect the flower. The engineer sympathizes with his engine, and thus, as the engineers say, secures better speed than a cold, heartless engineer.

In short, man feels kinship with all the world about him. He cannot avoid the feeling, if he would, that everything about him has a nature akin to his own. All human life moves in this "primal sympathy" between the self and the objective world. Thus the altruistic spirit is as universal and as deep as life. The love of truth, as well as the love of people or animate things, is altruistic.

In fact, the law of altruism is the law of existence and life in the world everywhere. Everything has its being in and thru some other thing. Evolution has taught us the great truth that nothing can live unto itself alone. The finger lives in and thru the hand, and the hand in and thru the finger. The plant lives in and thru the soil, and the soil in and thru the plant. A thing is as essential to its environment as the environment is to the thing.

Even in competition and grasping monopolies the law of altruism still holds. Competing industries and organizations to thrive must come to terms dictated by those who patronize them. No greater kindness was ever done to man than that done by a heartless, grasping railroad corporation. If some charity organization had put itself to work to do the very best thing it could do for humanity, it could do no better than has been done by so-called heartless corporations. Suppose that mankind had waited for the church and benevolent institutions to have built up the industrial system by which man attains his physical and spiritual freedom, we should still be in utter bondage. I am not claiming that it is the conscious purpose of a corporation to benefit others, but, to all intents and purposes, what is done under competition works to that end. God makes the wrath of man to praise him. There is a spirit that rules in these matters above the individual consciousness. There is such a thing as true and honest competition. It is the method by which civilization is worked out. In true competition both parties are benefited—both he who competes and the one whose patronage is sought.

No case can be found in which altruistic and egoistic duties are in conflict. The young lady who misses school to take care of her invalid mother seems to be very self-sacrificing; but what would she sacrifice if she deserted her mother? Her duty to her mother is likewise a duty to herself. Man's duty is to be polite to his fellow-man, but it is a duty which he owes to himself. An obligation on one side is equally binding on the other. Man can love his neighbor as himself. Man's standard of self-love is this: he will do nothing to mar the jewel of the soul, and he will do everything possible to realize his highest manhood. This standard of self-love applied to one's neighbor proves that one can love his neighbor as himself. For man may say, "I will do nothing to harm my fellow-man, and I will do everything in my power to aid him in the pursuit of the highest good." Altruism does not require one who has earned a dollar to give it to another. If so, it would require the other who earned a dollar to give it to the first. In this case there would be shuffling of dollars to no purpose. In fact, if the law of altruism is one-sided in its requirements, the man who is offered the dollar would be compelled to refuse it. The whole movement of life is blocked on a one-sided altruism.

Now, we shall come to the root of this whole matter if we examine into the nature of *self.* Self is the organic unity of this self and the other self. If at this moment I should say "myself," and then, after mastering the struggle for American independence by the study of history, I should say "myself" again, I would include in myself the period of history which I had mastered. If this history is myself after its mastery, it was myself before. I read a poem and am flushed with a new life. The poem now is a part of myself, and it must have been my future, my possible self before. No conception of self can be formed which does not include both subject and object. And here we have the gist of the whole matter. A child is prompted to study by its altruistic impulse. It craves the other world as another self. The child in thinking is striving to break down the distinction between subject and object. The teacher's chief work is to set up tension between subject and object, and to stimulate such processes of thought as will release the tension.

The value of a subject of study can only be estimated in terms of the breadth of outlook which it gives into the world about. Studies cannot be estimated in terms of discipline, but in terms of outlook, and therefore of increase of self. No one would undertake to compare the disciplinary values of Choctaw and Latin. But, in terms of outlook and of subjective increase, the comparative value is strikingly in favor of Latin. Latin opens the way out into laws of language in general, and reveals to us the thought and spirit of a marvelous people.

It thus appears that no reason can be given for studying a thing except in terms of the life of the learner. It is often said that we teach history in order to make good citizens, but I think that no one ever studied history under such a motive. What he really craves is a larger life thru the touch of the spirit of the race. Man climbs the mountain and views the landscape under the rising sun; he does it again and again, and can make no explanation other than the sense of the larger life thru his broader outlook. Man sits upon the seashore and looks out into the infinite surging sea, and finds no answer, except in terms of his infinite surging self. Teachers have too long been trying to explain and justify what they do in terms which do not ultimately explain. The objects of study and fields of thought mastered must be transformed into the life of the student. It is "more life and fuller that we want." The spirit of man longs for that which is not itself; having mastered this, he is more of a self. Thus the two sides of egoism and altruism are inseparably linked in every life-process. Man goes forth to realize himself, but there is no way of self-realization except thru self-sacrifice; that is, losing the self in the truth and beauty of the world about, which is the other self which every individual strives to become.

THE HIGH SCHOOL AS THE PEOPLE'S COLLEGE

G. STANLEY HALL, PRESIDENT OF CLARK UNIVERSITY, WORCESTER, MASS.

Education may fit the youth to live in the past, the present, or the future; and systems may be distinguished according to the relative influence of each. In the Renaissance, which was the golden dawn of secondary education, the past ruled. The literature and life of ancient Greece and Rome were revived. Sturm's goal was so to train his pupils that if they were suddenly transported to Rome or Athens they would be at home in the language, history, and customs. The vernacular was formed on the model of the ponderous Ciceronian sentence which set all the fashions in style. Latin was the language of the school and the playground. The games and the whole atmosphere harked back to antiquity. There was no contemporary literature, history, science deemed worth while. The fashion and the earmark of culture was to write a style interlarded with classical quotations and allusions. Liberal education consisted in reviving the dead past, and the results were remarkable. The boys became young Greeks and Romans.

How have we fallen away! Years of the study of Latin and Greek do not accomplish what months did then. Methods and results alike are degenerate. The baby Latin and Greek taught in our high schools is but a sanctified relic, the ghost of a ghost; and we find today almost every degree of degeneration from the golden age of secondary classical training. This is confessed even by its representatives in the German *Gymnasia*, where the old ideal is still best maintained in the modern world. An informed writer says that this high-school fetich no more revives antique culture than the soil is fertilized by the smell of the dung-cart driven over it; says that he has been incapacitated for his duties in modern life by the seductions of this phantom, and that his grandfather, the president of the United States, was injured by it, altho, pathetic to relate, he always praised it. The German emperor, in his famous rescript, declared it a shame to the modern youth to excel in Latin composition, and declared that he would have no more *Gymnasia* or Professor *Hintzpeters*. Norway forbids and Sweden has almost banished it from the secondary schools. The well-known Frankfurt method substitutes three years of modern languages for this, and finds at the end of five years pupils have more than made up. Mr. Reddie at Abbotsholme, Lietz at Ilsenburg, Demolins at L'école de Roche, have set back fires that are spreading in their respective countries. Booker T. Washington says the two chief desires of the colored youth during all the reconstruction period were to hold office and to study Latin, and that his life-work for his race has been directed against these two evils.

I raise no question of the great value of these studies for those who go deeply into them. I acknowledge an inestimable debt to antiquity. I believe in humanistic culture. But when I find that during the past ten years, in which our high-school population has more than doubled, Latin has increased from 34 per cent. in 1890 to about 50 per cent. in 1900, while the proportion of those who go to college has decreased from 14 to 11 per cent., I believe the educational waste and devastation, in view of the growing claims and growing neglect of modern subjects, are calamitous to the point of pathos.

Despite vigorous denials, I am convinced that the general complaint of imperfect command of the mother-tongue by high-school youth is due largely to translation English, and I cite the report of the Harvard entrance committee which challenges comparison for slovenness and mutilation of good English style; and yet it is just at this stage, before the power to read without translating is acquired, that a recent writer says the chief benefit for the vernacular is acquired. Most high-school Latinists do not go on to college. Beginnings that leave abandoned tracks in the brain because there is no relation to after-life are evil. Moreover, it is a purely formal discipline with almost no content as now taught. Its practical relations to life, arts, literature, which are so magnified, are of the slightest. Thirty-four per cent. of those who drop out of the high school do so from loss of interest and enchantment, and this is true mainly with the classics.

What keeps these studies alive? First, their traditional respectability. The high school was the Latin school, and children and parents feel they have launched on a higher stage in development when they are known to be students of Latin and perhaps algebra; especially is this true of Catholics. Moreover, Latin is often required in the first high-school year, still more often strongly advised. Again, it is probably the easiest and cheapest of all subjects to teach. I would undertake to hire a hundred female Latin teachers at shorter notice and for less cost than in any other topic. Again, college requirements and possibilities are an enormous bribe, and our secondary education is losing its independence by the excessive interference and dominance from above; and, finally, one can teach Latin and break in the youthful mind with more authority and ease than in any other topic. The voice of its defects is either hoarse or thin and piping with age. They are the rear guard in the retreat of what was once a great army; but the grasp of this dead hand from the tombs of culture must be relaxed.

How different when we turn from the too exclusive dominance of the past, which has its stronghold in that most conservative of all institutions, perhaps the church not excepted, to the training that fits for modern life in the present! Happily there is always a rapidly growing tendency in every modern race and nation to make its schools in its own image, and to measure their efficiency by how well they fit for the domestic, social, political, industrial present. It is the burden of the German Kaiser's complaint that the schools do not give him good soldiers, well-trained civil servants, competent administrators, intelligent patriots. The ministry, and still more the law, show progressive inadequacy to the demands laid upon them. Mr. Kidd would test schools by the maximal social efficiency. Our own Dr. Harris measures them by the thoroness with which they prepare for the life of state, church, school, and home. We often imagine the enormous stimulus which would follow if educational requirements were as thoroly enforced here for our 120,000 office-holders as they are in Germany, where, to fill the lowest office, one must have attained a certain state schooling, and each higher stage up thru secondary and university grades opens the possibility of higher and higher government appointments. Business and trades also have their requirements.

To interpret "fitting for life" to mean fitting for the best service in existing institutions of the present, altho immeasurably better than fitting for the past, brings, along with all its inspiration, a growing danger of narrowness. It is a Roman postulate dear to organizers and to those who love to impart prepared knowledge, which the mature intellect selects as most useful. It tends to utilitarianism and is illiberal, whether one is fitting for a trade or for college. Standards are external, and the question is: Will it pay, whether in money or in passing examinations? Those who thus conceive education place the social organism first and subordinate the individual to his place in it. Citizenship bulks large compared with manhood and womanhood. Their philosophy of education, if they have one, is clear and convenient. Napoleon organized French education on this plan that it might give him good officials. Three-fourths of the students of the *lycées* look forward to snug little berths, and those who fail, after weary years of eating their hearts out, turn to independent careers from necessity, as a last resort. An office, with badge, uniform, and permanence, is the French parent's ideal. The hopelessness of reforms in secondary education here is due to the excessive surveillance of the school to the needs of the social and political community. The French boy's spur to graduate early is that he may get in the line of promotion in office, which is always by seniority. Families have to be small, because every addition diminishes each child's share of the parents' property, and no girl and few boys can marry without a dowry. The French schoolboy thus foresees everything in his career at the start, save only the date of his death, unless he fails of appointment and remains a candidate for starvation. In China the evils of this system are more fully developed. Demolins well says: "That system of education which attempts to adapt the young to existing institutions is bad and must fail." It tends to make young graduates tuft-hunters and place-seekers, hoping to secure by influence soft berths, instead of launching forth and carving out a career for themselves. They are always fitting for something, accumulating learning for the highest market, and the aroma of the trade school penetrates academic halls and causes premature, undue specialization.

But there is a third muse, the inspirations of which are now more and more felt, which teaches that the school should be the bud and nursery of the world that is to be; that it should not be made in the image of the present, but should fit man for the next stage of development in the race and nation. In the present age of rapid transition and expansion of our race, the future and the ideal must be more dominant than ever before, or we are dwarfed as a nation. This is a good age to be young in. It is the psychologic moment for new pedagogic aims, topics, and methods, when the pulses of the old are quickened as with a new adolescence. Our children must not be trained merely to defend the old fortresses of civilization, but to carry on offensive and defensive warfare in fields as yet unexplored. We must not only augment present, but projected, efficiency. Altho the method of fitting for the future is to overflow the needs of the present, just as outgrowing our old soul is the best way to molt a new one in an age of moving equilibrium, we must remember that very much that we praise is deciduous; that the present is not a finality; is a germ and not a blossom, and still less a fruit; and that, unless we are to be jingoes and chauvinists, after knowing the spirit of the age, we must quite as often oppose as serve it. Youth is prophecy, for which its ideals are proverbially the best material. The battles of nations are sometimes won decades before on the school playgrounds. "As Oxford feels and thinks," runs the old slogan, "England thirty years later will act, for it is here that her history is preformed." Otherwise we turn out graduates like the man born just too late, who spent his after-life trying to make up for the last quarter of an hour. Thus we teachers must always, and especially today, be dual personalities: on the one hand, held to our primary organism, and careful that no good in the past be lost; but, on the other, smitten with a divine discontent with the present and its works and ways, trying to make our own lives more honest and exemplary, and more hopeful and worth living, because we give life to others, and worshiping the god of the present but as an ex- or emeritus deity when the god of the future shows his face.

What will the high school, as the people's college, be and do? I answer—if you will pardon summary phrases for the sake of brevity:

First, it will teach English with the chief stress, not upon language or form, but upon content, literature, history, and science. It will not exclude the Bible—man's chief text-book in psychology, human nature, self-knowledge, self-reverence, and self-control; its prophecies as the best school of the future; its appeal to faith as the substance of things hoped for; its poetry of nature, of morals, æsthetics, and of the true piety of the heart as that out of which are the issues of life; as that which follows the order of the soul's unfoldment thru boyhood, adolescence, maturity, and old age, for which one American university already gives credits on admission.

Second, the people's college will teach oratory. I have found fourteen widely used books on rhetoric which dilate on punctuation, paragraphing, the subtleties of style and good use, proofreading, correct and incorrect use of idioms, theories of poetic structure, narration, description, and, above all, composition, which A. S. Hill's *Rhetoric* says is the "main business of the teacher of English." "Rhetoric is proper words in proper places, and the teacher must be all the time on the watch for errors," altho not one student in ten thousand has anything to say; and rhetoric, it is said, does "not teach or imply thinking clearly." Now, the very word "rhetoric" means oratory. To Aristotle it meant giving truth the superiority which belongs to it by its nature. It means the art of influencing conduct with the truth sent home by the living man. Rome knew no other education, and only in her decadence did rhetoric of our type arise, with its trifling, artificial, sophistical way. Some of this the English of the people's college should restore.

Third, the drama at its best is an incomparable school of life. The characters stand out clear and distinct; both they and the action are far easier to comprehend than in life, where all is more complex. Dramatic reading suits youth, and very much can be done in a single high-school year, even without a school theater, if we would only abandon our senseless worship of notes. I visited a high-school class which had spent three weeks on *Othello*, not one of whom yet knew how the story ended. The good drama is moral, because it rewards the good and punishes the villains. The lid of conventionality is taken off human nature, which is seen in its pure types, and a wholesome carthasis against evil is applied. There is always conflict, collision, and passion, which suits youth and makes the theater often truer than history, teaching the power that makes for righteousness. The decay of the modern theater from its happy ideal is hardest on youth.

Another content study in English work should be the great mediæval epics. Quintilian said that such "contribute more to the unfoldment of students than all the treatises that all the rhetoricians ever wrote." High-school boys have passed the age of chief interest in Homer content, but it is the age of King Arthur, the Sangreal, Parsifal, Sir Galahad, Siegfried, and Lohengrin. This is the quarry where Chaucer, Shakespeare, Scott, Tennyson, Wagner, Ibsen, and scores of artists have found their inspiration. The theme of it all is chivalry and honor — the noblest thing in feudalism. It means reverence for womanhood, pity, valor, loyalty, courtesy, munificence, justice, obedience, and heroism. Here grew the ideals of the gentleman, who was tender, generous, and helpful as well as brave. Morals and æsthetics have never been blended in a way which better fits the nature and needs of youth.

Thus the purpose of literature in the high school is supremely ethical, and the talk of art for art's sake here is degeneration. The receptive faculties are indefinitely ahead of the creative, hence to read, and, above all, see, should take great precedence over composition, which comes hard and late; unless we wish to teach youth fluency with nothing that burns or is worth saying.

Next to English in the people's college should come science, which teaches love and knowledge of nature — the great mother of us all, and from which religion, art, and literature, as well as science, have sprung. The sciences chosen should be those that give largeness of view rather than precocious accuracy, and we should remember that man was a naturalist long before the laboratory. Youthful curiosity always strangely gravitates to frontier questions, where we are all children, and loves to play with great ideas — force, atoms, vast astronomic space, and geological time; is curious about remote lands, primitive people, strange animals and plants, the origins of things, and perhaps their end and destiny. The high school has laid too great and early emphasis upon physics, which, in the last few years, owing to college forcing and bad methods, as I have elsewhere pointed out, has declined. First, high-school science should always include the elements of astronomy. Natural curiosity about the heavens is now almost at its strongest and best, and the result is reverence, for "the undevout astronomer is mad." Very little celestial mathematics is needed; that came late; little calculation of eclipses or tides, or minute work with noon marks, but a meaty body of facts about nebulæ, the number of stars, the distances of those that are most remote, their motions in systems very different from our own; collisions, comets, the dead planets; the sun and moon, than which Plato and Aristotle knew no higher gods; the hero-ology of astronomy, which has had its saints and martyrs; its epochs, its culture-history, and astrology; and what the great astronomers are now doing.

Again, geology should have a place. It takes little children out of doors, interests them in landscape, teaches them to understand it; glaciers and the ice-age; the dynamic side of air, water, heat, and life from the palæozoic age down; a little structural geology, with the composition of rocks, ripple marks, beaches, and shores; the history of the globe from its origin; something of cartography, with knowledge as well as love of the face of nature; large views of time, and how the ascending orders of plants and animals arose. This is far harder to teach than chemistry and physics, and the nose cannot be held to the grindstone so steadily and securely. It requires a larger body of information and more real teaching.

Biology should certainly have a place. Not necessarily the technique of histology or the microscope; less about the cell, and more about natural history than nomenclature or classification. The fertilization of plants by insects and flowers opens a great opportunity for the skillful teacher to instill great moral lessons at an age when they are most needed, and with most unconsciousness. While migration, habitat, economic and human aspects; our knowledge of animal instinct; noxious and healthful plants, insects, and animals; domestication; nests and homes; laws of growth in man, and his general anatomy and physiology, should have place, with themes wisely chosen from anthropology.

These three are real or substantial content studies, while all language work and even mathematics are relatively formal. I would by no means exclude mathematics or modern languages, but would give them a secondary and more elective place in a high school that is to be truly American.

The third group of topics in a secondary system that fits present nature and needs is distinctly motor or efferent, and involves the training of the muscles and the will, more or less inseparable at this age. I have no space here to describe how either the games or the manual training should be conducted in detail, but will only state its goal and ideal, which is efficiency. Here boys should be rated by what they can do. There must be the germs and educative extracts of just as many trades and industries as possible. On this practical side no better ideal can be conceived than that of fitting young men for success in the newer and more unsettled parts of the country or in our new colonies. Horace Greeley's "Go west, young man" fits for life in a way almost ideal at adolescence. The younger sons of British nobility and the middle classes are beginning thus to be best trained. If we do not fit our youths for the geographical frontier, we should inspire them with the idea of beginning at the bottom, so low they cannot sink lower, but where every change must be a rise. They should take their places between younger and less trained men, and trust to merit, with blood and iron enough in them to scorn sedentary ideals or the easiest way, and be, in Daudet's phrase, a *strugleforlifeur*. We must not forget that agriculture, mining, farming, trade, and commerce are the basis of all national life, and in a sense everything else is dependent on and parasitic to these. The mighty engine of business absorbs more and more of our best talent and requires ever greater energy, larger knowledge, breadth of view, and, especially, penetration into the future. It dominates statesmanship and the professions; its prizes are the greatest. Thus trained, our youths will plunge into strenuous life of achievement, and every man-Jack of them will want to bring his whole self to bear where he can compete and meet the verdict of his peers. If he is truly American, he will want to begin at the bottom, because he has a fundamental instinct of thoroness and fundamentality, and the wise parent will at the critical moment cut the navel string and toss the young out into the current of life to sink or swim. The Abbotsholme boys found their school a rubbish heap, overgrown with weeds, and took pleasure for years in cleaning it up. The man who means railroading will begin as a trackman; as a recent book says, will want to peasantize himself and fall in love with the soil, machine grease, coal, or cattle. If he is city-bred, he will plunge far into the country; and if a country larrikin, he will go into the city and strive to work to the top. If he is philanthropic, he will go into slum work and its squalor; if he is to teach, he will teach anywhere and anybody; or if he is to be a professor, he will fill half a dozen chairs at once in a monotypic college, because he loves independence and the satisfaction of doing.

How is this attained? In answer, I point to Hampton and some of the half or three-fourths industrial schools for the nation's Indian wards. Nowhere does education work such changes and improvements in so brief a space of time, and it is all because these youths touch life. Here we must find our norm; this is part of the people's college which we must improve on if we can. Personally, I am sometimes proud that I know how to do every kind of old-fashioned farm work; that in my German student days I took lessons so that I can bind, gild, and cover a book; make a shoe and a broom complete, do a little glass-blowing, plumbing, and gold-beating. But my pride is humbled when I see young men who can also make harnesses and saddles; are good blacksmiths; can apply a bandage, and do various kinds of rope-splicing; are amateur wheelwrights, carpenters, and coastguards; can print and do onyx work; understand ice-making, tinning, and electrical machines; are at home in the dairy, poultry yard, and garden; know the rudiments of forestry, bee-keeping, drainage, and photography—this is liberal motor education, and I bow to my masters. They are armed cap-a-pie and come down solidly on all fours, wherever life plants them. This is a part of the liberal education of the future. It gives character and makes men who will make our future social and political institutions in their own image and inspire them with their own soul.

This kind of people's college, with these three elements—English, science, motor training—and others added *ad libitum*, will say to the conservative endowed college of the East which, as is the case with three in New England, still gives no credits whatever in entrance examinations for any degree of proficiency in any of these things save English alone: Here are our graduates; we have done for them the best we could to realize all the possibilities of their golden age. We have given them a taste both of life and of learning; if our graduates can now do better with you than with us, you must take them. We high schools will now organize by ourselves; we know this stage of youth best; we will make our certificate and diploma system the best possible; and if our graduates are articled to you upon our word of honor, that must suffice. We owe you a great debt for training our teachers and for stimulating us in the past. That debt we will now pay, but you must no longer prescribe our work or define our field any more than your own is prescribed. It may be a hard lesson at first, as was yours to us, but it will be no less wholesome; both in numbers and stimulus, your work will improve.

Finally, I am more and more persuaded that in its highest sense teaching ought to be a universal vocation. Guyau says that it should be the only education for women. I would add, and for men as well. Statesmanship, religion, and science all become precious according as they tend to the ever higher development of man. Education involves all other topics, and is that in which the education of all should culminate. The greatest of all reforms are educational reforms, and none others are complete without it. It is the best measure of progress. The philosophy of education is the highest and only philosophy. It is our chief obligation to the future. Its work consists in making an ideal environment for the development of the super-man that is to be; and, while we must train the intellect, the will is far larger and the heart larger yet. Aristotle defined education as teaching men to fear aright; for Jesus it was to teach them to love aright, to fix the affections on the highest and wean them from the lowest. Some have conceived it as teaching men to be angry aright; not to fret at trifles, but to generate torrents of consuming wrath at great abuses; or to pity aright and shape the charity of the heart toward fit objects. In a single word, it is human evolution, and its goal is so to construct experience and knowledge as to advance growth. An age of growth like the present lays upon us new and larger opportunities and duties, and history waits to see if we can develop the wisdom and the vigor which our age demands. It wants not talk, but deeds; not theories, but practical and in some respects radical reconstructions.

DISCUSSION

IRWEN LEVISTON, superintendent of schools, St. Paul, Minn.—We who are thoroly acquainted with the present status of the modern high school are more than pleased by having such men as Dr. Hall turn their attention to this subject. And we are more or less pleased with what he has said upon this subject today — at times less, at most times more. The question whether we have degenerated since the time of Cicero, or, for that matter, since Adam, does not concern us; but has the high school degenerated since Dr. Hall attended it?

The high school has not only needed, but deserves, more consideration than it has received in the past from our educators of national reputation. Of late the universities have been receiving endowments, heretofore unheard of, and thereby commanding the talent, experience, and genius of the great scholars and educators; while the high schools have received only niggardly and grudging support from a protesting public, resulting in poor equipment in the matter of apparatus, libraries, and quantity if not quality of teachers.

Again, the high schools have for years occupied a difficult position in the educational system; for, on the one hand, they have been compelled to accept pupils whose preparation and qualifications have been determined without their consent, and, on the other hand, have been obliged to furnish pupils fitted for fixed and undebatable requirements on the part of the universities; and the high school must give what the university demands or be rated as second-class. At the same time they have taken the teachers that the university sends to them, trained in special lines, but not in simplification of knowledge.

Along with all this comes the demand for practical teaching in business courses, with commercial geography, industrial history, modern language speaking, domestic science, economics, etc., etc., until it is little to be wondered at that the mind attempting to formulate a course of study becomes befuddled and bewildered.

Again, not a few parents are attempting to make the schools entirely responsible for the moral status of our pupils, compelling us seriously to consider what sort of a course in ethics applied thru the few school hours of the day will safely carry the boys and girls of the high-school age thru the dangers that surround them outside of school hours.

Notwithstanding its difficult position and the demands made upon it, I believe the high school of today is a success, and worthy of the name which is applied to it in our subject; that it is proving a rapid developer of intellect and teaching its pupils the enjoyment of mental excitement beyond all material pleasures; that in character-building it today outranks every other department of education, not excepting our old well-mannered colleges and those fitting schools making special claims to high moral training; that in its associations there is the most and best of preparation for any kind of future living.

If I am right in these assumptions, the only true plan to pursue in merging the high school more completely into the people's college is to strengthen, adapt, and perfect what we already have. A hastily planned structure on poor foundation furnishes an excuse for pulling down to build better; but a steady natural growth cannot be treated in this manner. No variety of the tree of knowledge will be made to bear better fruit by tearing up its roots.

Gradually and steadily the high school has been widening its field of work, to adapt itself to universal needs. Those who wish to assist it must help to popularize it, and feed it *funds*, direct into it teachers of capacity, give it sympathetic suggestion rather than violent criticism.

To show the worthiness of the high school, I should like to take time for details concerning the development that all the lines of study have undergone during the last decade, but that would be too great an abuse of your patience. Will you bear with me while I briefly outline some changes that have taken place and are being considered in one course? I select the business course, because it is, perhaps, below the middle stage of development in most schools. It was at first, as you all know, forced into the curriculum to satisfy demands wholly and materially practical. It was then generally a short course, furnishing two years of so-called commercial arithmetic, bookkeeping, stenography, and an early graduation.

Those engaged to carry on the work had no claims as educators, and seldom any knowledge of the methods of teaching. This course invariably became a sort of waste-basket into which was conveniently dumped all the poor and unwilling pupils of the school, and it became simply unendurable and wholly incompatible with the good old-fashioned work that was being done in other departments. It was too bad to stand, and many schools rejected it entirely. Others combined with it the so-called regular studies thru four years. This plan was better, in that the pupil employed a smaller portion of his ime upon these subjects, but the commercial course itself was very little improved. It was, however, a right beginning, in that it insisted upon some education. A little later some dignity was added to the course by including at least one modern language as one of its regular studies. Commercial law was added, and now commercial geography and industrial history have a place, and the first benefit that the school as a whole is deriving from it is shown in a better teaching of civics. A few steps more and we shall have a fine course of correlated subjects, the graduate from which will not be fitted merely for clerkship, but will find himself introduced to the whole wide field of business effort in the world of today, and at least ready to make a decent bow to the authorities in it. He will be able to distinguish the controlling influence from the loud-toned wishes to control; the solid from the speculative; true economy from miserly scrimping; capable, masterly handling of large productive powers from schemes for grasping what is already produced. He will have been made thoroly acquainted with a few important materials of commerce, the manner of their production, distribution, and consumption, not only in a historic way, but with an intimate knowledge that will discover the faults as well as the fashions of trade.

With competent teaching he will be led, not only to an understanding of natural economic laws, but also to discern how the human factor enters into and disturbs every department of commerce; how personal interest may, and does at times, interfere with all the laws of political economy. When we have brought our business course to this point, is there not opportunity for the application of psychology? Cannot the idealist and materialism both find common cause for quarrel in this as well as any other course? I do not know that I have been able to make this one line of development in the high school toward the general college clear. It in itself would furnish a subject that is worthy of much time and consideration. And in other courses the development has been just as evident to those in the work.

I hope to show only good cause for continuing and perfecting the present plans in high-school work, and for strengthening the hands of those laying out these plans, and to head off any radical changes that might be proposed by those outside of the actual high school work. In short, I do not wish to be asked to stand over the tomb of the high school while attending the christening of the people's college.

WM. T. HARRIS, United States Commissioner of Education.— I have listened many times, and always with the greatest pleasure and interest, to Dr. Hall's speeches. I read every line he writes. I do not always agree with him, but I find him always suggestive. I have never read a paper of his with which I find myself so thoroly in agreement as with the general thought of the address just delivered. I will, however, call attention to a few points in the paper from which I must dissent.

The first point concerns the tendency toward the study of less Latin in Germany. I do not agree that this calls for change in America, because we give to the subject much less time than is given in Germany. I believe in the study of Latin. Yet we can have too much of a good thing, and it is not good to study Latin eight years. The movement in Germany means that they will give to this subject but five years, and I think that is almost too much.

In his emphatic way Dr. Hall demands content, not form. We are taught by the highest philosophers of art that the content should make its form. If what he says, and what other earnest people with him say, can free us from namby-pamby composition, I will rejoice. I would not have the study of a masterpiece of literature carried on by parsing it, taking it to pieces, studying the allusions. What he said on that point is a splendid utterance, and what he said about drama is a magnificent utterance. Drama goes over into thought, and then becomes action, and therefore furnishes the greatest essons in life, whether gained in college or in lower school. I always remember with great pleasure that, in the earlier years of my life, we had in St. Louis a teacher who taught Shakespeare. It was taught there by a man who made some of the best Shakespearean students in the world.

I agree with the portion of the address which refers to the study of physics. I would have the pupils study physics in the high school, but not the kind of physics which requires calculus in order to appreciate it. I read Dr. Hall's debate in Massachusetts on that question, and I agreed with him in his position that, if you demand more accuracy in the high school, you may go too far in that direction; you may dry up the soul by putting it at things too remote. I would have pupils begin to study the phenomena of physics in the third grade.

I was sorry to note that Dr. Hall omitted any allusion to history. It is one of the great fundamental branches, that should be begun early and carried on thru the high school. Instead of saying, as he does, that we do not want to fasten to the past, I would say: "Fasten our chains to the past in order to bring under tribute the good things of all time." The school is that institution which says: "I will show you how to get the great things from the past." One of the great branches, showing the human race acting as a whole, is history, and nothing else can be a substitute.

The past reaches back even to the lower animals. God did not begin with man, but back with lower animals, plants, and the inorganic world. In this matter of history, therefore, certain things have been contributed to the race that are so far below the horizon of the past that we have no record of them, but we know that the effects have impressed themselves on the human brain; but when it begins to be unfolded in science, when this science yields its fruition, we can tell whether its history roots in the Greeks or in Siberia or in the isles of the sea. The great struggle of the Romans extended thru a thousand years, and they struggled to find out just how the individual acts could reinforce the whole people. After some eleven hundred years, in the time of Justinian, these acts were formulated into the common law, because the Roman was gifted in seeing how the deed fitted into the social whole, just as the Greek religion saw how freedom could fit into the pose of the body.

Now, that is the reason why Latin has made for itself so great a place in the schools of modern times. It will not be pushed aside. I have always regretted that Dr. Hall in his grasp of modern science does not seem to see it in its true perspective with modern history. He should have said that Latin keeps this place because of its importance. The Roman invented a way so that the social whole should not crush the individual. The northern tribes, when they had been Romans two hundred years, recognized the importance of Latin.

Dr. Hall's technical terms are Latin. Sixteen thousand words sum up the Saxon in our vocabulary; seventy-five thousand in common use are from the Latin, storing up the fine distinctions in the minds of the people. If you can study Latin only one week, you will have new thoughts that you can never get rid of; you will have new environment; preaching from the pulpit will mean more. Therefore I do not agree that we must keep Latin for those only who can study it thoroly. I suppose Dr. Hall has in mind some old person who has taught for thirty years and can tell all the exceptions of Latin syntax. The word "recapitulation" is an important word; it is a whole book in itself, in this active period of recapitulation in anthropology. This is the battle-ax with which Dr. Hall wins victories. I always wish to give three cheers for Dr. G. Stanley Hall. May he help us to think and to see once in a while how absurd some of his views are! He puts these things in a way to arouse us; he does not wish us to become his disciples — he wishes to arouse us by saying something absurd.

DR. HALL.— It was somewhat of a surprise to me that when Dr. Harris entered this arena he grasped my hand, as pugilists shake hands before beginning a contest. My surprise was continued when he said that he in the main agreed with me. To kick at nothing gives one a feeling of a wrench. I thought I had attacked some things Dr. Harris has defended for years. I now feel as if I was wrenched.

Dr. Harris and I have inherited every feature of our faces, every muscle, and every organ from the anthropoid apes. Must all therefore study monkeys? Of course, we use Latin phraseology. When Dr. Harris says we all should study Latin a week, I agree.

In regard to the study of Latin in Germany, I think Dr. Harris did not understand what I said. I am aware that Latin and Greek are more firmly intrenched there. The emperor said he wanted no more *Gymnasia*, no more Latin teachers, but instead a great many *Realschulen*. When we come to that, I believe it may be said that a larger proportion of time in the preparatory schools is given to Latin in this country than in Germany, but I have not the statistics. The proportion is decreasing there and is increasing here.

Dr. Harris thinks that absurd things must be said to arouse us. Perhaps under the direction and guidance of such a mentor, who has been for so many years such a correct pruner of my sentences, I may have become lax, because I knew Dr. Harris was on hand and all would be set right.

I am, however, inclined to think men reach an age when the new seems absurd. When roots are so wrapped about ancient things that the past begins to loom up and the future to seem smaller, there is danger that we shall worship the past and live for it alone. I prefer the future, because all the best things are in the future, and I believe that the past should be subordinated to it.

I had only one word in my paper about history. I said that the first of these subordinate topics should be history. I agree with what Dr. Harris says on history, and I am glad to close this discussion with the acknowledgment of agreement with him.

COLLEGE GRADUATES IN ELEMENTARY SCHOOLS

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If a visitor from western continental Europe, after inspecting our American educational system from the primary school to the university, were asked to compare it with that of his own country, he would in all probability express an opinion as to the relative merits of the various grades of schools which would in many respects be the direct opposite of that which is held among ourselves. He would no doubt say that the best American primary schools are not excelled, and are rarely equaled, in any other country in the world. He would note the absence of the dead formalism and mechanical routine which still prevail in his own country to a large extent in schools of similar grade, and he would especially note the sympathetic relations existing between teacher and pupils, the mildness of the methods of discipline, and the superior skill of the teacher in arousing the interest of his pupils and in stimulating thought and mental growth. He would probably say that the best American grammar schools compare on the whole not unfavorably with similar schools in his own country, but that they have certain defects which at first sight are not apparent, but which on closer inspection cannot escape the trained observer. He would probably say that the American high school excels in its superior equipments for the teaching of the sciences and in the flexibility of its courses of study, but that in other respects it does not compare favorably with similar schools in his own country. He would note the inferior training, both academic and professional, of the average American high-school teacher, and he would be impressed with the lack of forcefulness, clearness, and definiteness of much of the teaching. He would be surprised to find that between the secondary school and the university there comes an institution, called the "college," which is not found in his own country, and which continues the work of the secondary school for two or three years and then attempts university work without the necessary equipment for such work. His verdict would probably be that much of the teaching of the lower classes of our colleges is inferior in quality to the teaching in the upper classes of the secondary schools in his own country, and that none of the attempts at university work in these colleges is equal to the university work with which he is familiar. He would probably say that of the many institutions known by the name of university in America not more than ten or twelve properly deserve the designation. He would recognize that our universities are only in process of evolution; and he would have to admit that, while they have accomplished comparatively little as yet, the conditions exist for a brilliant development in the near future.

In a word, taking our educational system as it now exists and comparing it part by part with that of his own country, this visitor would probably have to say that, speaking generally, it is relatively strongest at the bottom and grows weaker as you approach the top.

It is not the purpose of this paper to discuss the question as to how much truth there may be in such a general verdict; but it may be remarked in passing that, whatever truth it may contain, it is not wholly uncomplimentary to American education, for it implies that this country has placed the emphasis on the education of the masses, while less democratic countries have placed it on the education of the classes. It may be said, furthermore, that indiscriminate praise of the schools of one's own country is not necessarily patriotism; it may be blind provincialism, largely the result of ignorance of what other nations are doing. It behooves us, therefore, to view our educational system in the spirit of impartial and impersonal criticism, to discover its weak features, and to devise means for remedying them.

I take it that the chairman, in assigning the subject of my paper, had in mind certain defects in our elementary schools which the introduction of the college graduate as teacher may possibly remedy. It is the discussion of this very limited subdivision of a large and very interesting question to which this paper must confine itself.

The elementary schools have defects, some of them serious, which are due to causes that cannot be removed by appointing college graduates as teachers. The college graduate in the position of teacher cannot loosen the grip of the politician on our school systems, he cannot increase the appropriations for schools, he cannot build schoolhouses and relieve the overcrowded condition of our schools so as to make it possible to assign to each teacher no more pupils than he can become personally acquainted with within the limits of the school year. Evils which are due to the inferior character of the community, to antiquated organization of the school board and the school system, or to incompetent or inefficient administration, cannot be remedied by the appointment of the college graduate as teacher.

As already stated, the teaching in our primary schools is, relatively speaking, more satisfactory than the teaching in either the grammar schools or the high schools. This is probably due, first, to the fact that the teachers in primary schools are women, are sympathetic with childhood, and have great native skill in teaching little children. The qualities required in a good primary teacher are fortunately common in women. In the second place, it is due to the fact that the scientific study of children, in which our country leads today, has centered more on early childhood than on youth. We know more about the period up to the age of ten than we do of the period of adolescence and of the period immediately preceding it. In the third place, it is due to the fact that our normal schools, almost without exception, are training teachers better for the primary than for the grammar grades. In the section of the country with which I happen to be most familiar it is easier to secure a half-dozen good primary teachers than to find one superior teacher for the upper grammar grades. There are, however, problems in primary education which are altogether beyond the average primary teacher who may be exceedingly skillful and effective in her work as a class-room instructor. These are problems which require a much broader training, a wider outlook, not only upon the first of pedagogy, but also upon the various sciences which have so much to contribute to educational thought today. The academic training of the normal schools is generally neither extensive enough nor thoro enough to equip a teacher to meet these problems. There is need of the college-bred woman in our primary schools, especially in the positions of principal and supervisor, where effective training and direction of subordinates is essential.

The teaching in our grammar schools is less satisfactory; indeed, the upper grammar grades are probably the weakest part of our system of elementary schools. Success in teaching in a primary school turns more on good pedagogical training, on sympathy, tact, and an instinctive insight into child nature, than on wide knowledge of the subjects taught, altho the latter is also essential to the highest type of such teaching; but in the grammar school, especially in the upper classes, thoro scholarship becomes more and more an absolute necessity, and a preparation which might enable a teacher to obtain a fair degree of success in a primary school no longer suffices.

Making allowance for marked exceptions here and there, I think it may be said without unfairness that teaching in the better class of grammar schools is weak because of a lack of broad scholarship on the part of the teacher. This is especially true of the teaching of such subjects as geography and history. The knowledge which the average grammar-school teacher possesses of these subjects is very often limited to a mere text-book knowledge. To teach United States history as it should be taught, the teacher ought to have had, in the first place, careful training in the methods of historical study; he ought to have a clear conception of the social, political, and economic phases of the subject and the relative emphasis that should be placed on each in the instruction in a given grade; and he ought to have carefully read about all that Parkman, Fisk, and MacMaster have written on history, and be able to draw readily and with judgment on these sources in preparing his lessons from day to day. He should be familiar with English history, and should have at least a text-book knowledge of ancient and modern and European history, not only in order that he may have a sense of proportion, but also in order that he may bring to bear upon American history the many side-lights of modern European history.

To teach geography successfully in the upper grammar grades the teacher needs to have a general knowledge of geology, especially that subdivision of it which is commonly called dynamic geology; he must have a knowledge of physics and be trained how to apply its principles in the explanation of the phenomena of nature. He must have an elementary knowledge of chemistry and astronomy, and, indeed, also of botany and geology. In addition to this, he needs to be somewhat familiar with the social and political life of the most important countries of the present time, and to have a general knowledge of the important features of their commerce and trade.

There is a rich, popular scientific literature bearing on geography which is entirely unknown to a large number of teachers in our grammar schools, and which some of them have not even the training to read with ease and with pleasure. Altho most of the material which this literature contains cannot be presented to pupils of the grammar-school grade, the teacher should be familiar with it in order that he may have a large reserve of scholarship on which he may draw in his daily class-room instruction. It is only the master that can simplify the elements of a subject and write primers on science; the amateur and the novice fail. Teachers of inferior training live intellectually far too much from hand to mouth, and it is often difficult to interest them in lines of thought and of study which do not have an obvious and direct relation to their professional daily bread. It is the mark of a liberally trained mind to have many and broad sympathies, and to be interested in truth because it is true and not because it must be taught or can be made to minister to utilitarian ends. In a word, what the teachers in our higher grammar grades need is broader scholarship, broader intellectual interests, more scholarly habits of work, and the power of doing hard intellectual work with ease — a power which is partly the result of training and partly belongs to that inherited capital with which we start out in our intellectual life. Someone has said that "stupidity is not acquired, but is an original endowment of the human mind." The same may be said of that form of genius which has been defined as the capacity for hard work. It may be said with confidence that much of the overwork on the part of teachers and the breaking down of health is due not to the amount of work required of them so much as to their lack of broad training which would have enabled them to do hard work with comparative ease.

Now, the college graduate among teachers, as a rule to which there are indeed some marked exceptions, is a person of much broader academic training than the graduate of the normal school; he is a person of more scholarly habits and is able to do hard intellectual work with greater ease. He is, moreover, a person of broader interests, and has a clearer and a firmer grasp on what he knows.

There are several other elements of weakness in the teaching in our grammar schools which nothing but broader scholarship on the part of the teacher can remedy. The teacher in these schools is altogether too much at the mercy of his text-book; he is the interpreter of a book rather than the teacher of a subject. This is so forcibly true that few superintendents find it practicable to introduce a new study into the curriculum unless a suitable text-book on the subject can be found, or to make a course of study which does not more or less have in view the text-books to be used. In many courses of study the text-book is named and the pages to be covered in a given grade indicated. There are, indeed, cities in which the course of study ignores the particular text-books used, but on close examination it will almost invariably be found that the course is quietly ignored and the text-books are the guides.

This lack of intellectual independence on the part of teachers is due to their limited general scholarship and to their limited mastery of the particular matter to be taught.

Some of the teaching in our grammar schools lacks that forcefulness and effectiveness which both stimulate and demand work on the part of the pupil. Pupils in these schools could do considerably more work than they are now doing and accomplish it all within school hours, if the teaching were more forceful and energetic. We hear much complaint on the part of parents about overwork in school, but what is really meant by such complaints is not hard work within school hours, but too long hours of work, too many home tasks over which children must spend hours at home which ought to be given to recreation and sleep. Moreover, from an educational point of view the results would be vastly better. Mental growth is not promoted by long hours of dawdling, but by short periods of intense application followed by brief periods of rest and relaxation. If the teaching were what it should be, we could easily double the time now allowed for intermissions, not including the long noon recess, and still accomplish more than we now do and do a higher quality of work. But such teaching requires both native ability and good training.

Much of the teaching in the average schools is not clear because the teacher has never himself been trained to think clearly; much of it is not consecutive, and points are not clinched, even in cases where they have been made clear; some of the teaching is aimless, and therefore wasteful of time and of power. Archbishop Whately once said: "If you aim at nothing, you will hit it." This is strikingly true of the teacher's work. The remedy for all this is better training, and perhaps in some cases a higher grade of native ability.

The time has long since passed when our normal schools considered themselves the rivals of our colleges; they have their own distinctive work to do. To say that a good normal school cannot give as thoro academic training as a good college is simply to say that the normal school cannot do the impossible. The best normal schools of our country are fully equal to the best normal schools of any other country, but they could be strengthened materially by the appointment on their corps of teachers of a much larger number of men and women who have had a thoro collegiate and, if possible, university education, in addition to professional training. In this matter the normal schools of the West are somewhat in advance of those of the East. If the normal schools wish to fit teachers for the higher grammar grades, they must do a somewhat different kind of academic work from that which they are now doing. Instead of "reviewing" the so-called common branches "with a view to teaching," and then doing what is virtually high-school work, they must require graduation from a high school as a condition of admission, and then lay the emphasis on the group of sciences which contribute directly to a broad knowledge of grammar-school studies. In short, they must give their students a far more thoro mastery of the matter to be taught and of that related material which forms the necessary reserve scholarship.

There is a movement under way in Wales to provide college graduates for all the elementary schools, primary as well as grammar. In the larger cities in this country many college graduates have already found their way into the elementary schools. They have gone into these schools partly from choice and partly from necessity, inasmuch as the number of women graduates from our colleges who wish to teach far exceeds the number of vacant college and high-school positions from year to year..

If we wish to demand higher scholarship and broader training of teachers for the grammar schools, especially for the three upper classes, there are a few very practical preliminary steps which we must take. In the first place, we must allow teachers of the upper grammar grades to specialize; we must not require each teacher to teach all the studies of the curriculum, but rather assign to each a related group of studies which he is especially well qualified to teach. In short, departmental teaching in the upper grammar grades is a necessary condition of any marked raising of the standard of teaching in these grades. In the second place, we must increase the salaries of teachers in these grades above those of the lower grammar and primary grades. At this step we shall probably be met by the abstract proposition that the children of the primary schools require as good teaching as those of the grammar schools, and that teachers who do good work in primary grades ought to be paid as much as teachers who do good work in the higher grammar grades. To this it may be replied that such a question cannot be settled on the basis merely of an abstract proposition; that the law of supply and demand must govern teachers' salaries. The fact is that good primary teachers are far more numerous than good grammar-grade teachers, and, therefore, on business principles, the larger salaries ought to be paid where there is the greater demand and the smaller supply. Furthermore, we must devise a way of avoiding the payment of uniform salaries in our schools to the teachers of the same grade, of paying the efficient and inefficient alike. In this way it will be possible to get some exceptionally efficient teachers into every grade with comparatively little additional expense, who will serve as a stimulus to the entire corps. The obvious difficulties of carrying out such a policy need not be pointed out to this audience; suffice it to say that they can be overcome in time, and have already been overcome in some of the smaller cities where schools are comparatively free from politics.

If, however, we wish to appoint college graduates to positions in elementary schools, we shall be disappointed if we do not insist on their taking at least a year of professional training at a good normal school or a course in pedagogy at a university where there are facilities for practice-teaching. A course in theoretical pedagogy alone will not answer. This is a point which it is somewhat difficult to impress on college professors and on fresh college graduates. There prevails still in the colleges the mistaken belief that a knowledge of the subject-matter is all that is required to enable one to teach it. Many college professors do not realize, and others positively deny, that there is or can be a science of education, and the courage with which fresh college graduates undertake to teach a roomful of boys and girls, who often know far better than such a teacher the difference between good teaching and poor, is both heroic and pathetic. A normal-school graduate, with much less scholarship and even with less native ability, but with good professional training, will do far better teaching at first than a college graduate with no such training.

In spite, however, of all that has been said, it is well to bear in mind that a goodly number of the best teachers in our schools have never been either in a college or in a normal school. They are teachers of native ability; they are good students, and gained by practicing for years upon children that knowledge of the art of teaching which we nowadays get by professional study at a normal school.

Moreover, there is a large number of graduates of normal schools who are men and women of exceptional ability, who have been close students, and who rank far above the majority of college graduates, both in point of ability and in point of scholarship. Some of these have adorned other professions besides that of teaching. Scholarship can be gained outside of college walls, and it is not wise to make hard and fast rules in regard to college graduates and those who are not college graduates in the appointment of teachers. In a word, if college has gone thru a man, it is not absolutely essential that the man should go thru college. Franklin and Washington and Jackson and Lincoln were not graduates of college, nor is Herbert Spencer, the prince of living philosophers; and yet all these have achieved greatness, while there are not a few college graduates who have not yet been heard from. Indeed, it is quite possible to take graduation from a college altogether too seriously, especially in the earlier years of one's graduate life, before one has discovered his specific gravity by contact with the world. After all, we must bear in mind that even college graduates belong to that large group of the human race of which the poet sings in plaintive note:

Some men are born for great things,
And some are born for small,
And of some it isn't recorded
Why they were born at all.

DISCUSSION

SUPERINTENDENT A. B. POLAND, Newark, N. J.—I have listened to the paper of Superintendent Balliet with more than usual pleasure and satisfaction. I heartily concur in all the views expressed by him as to the desirableness, nay of the necessity, of having more college graduates in our elementary schools. The subject is one of great interest to me. In the city of Newark we appoint college graduates to elementary-school positions, without experience and without examination, accepting the college diploma as a sufficient guarantee of qualifications. It should be said, however, that under our rules an appointee who is not successful can be dropped at any time by the superintendent without the formality of going to the board of education to have such action confirmed. Many have been dropped from time to time in this way. Despite this safety valve, however, our practice, I must admit, is open to many serious objections. It makes the schools, that should be maintained solely for the good of the children, a field for trial and experiment. Our schools become practice schools without the saving features of a practice school when maintained, as is usually the case, in connection with a normal school. In the latter case the interests of the children are protected by the presence of competent critic-teachers. Whatever let-down in discipline or teaching may result from the employment of unskilled teachers is made up by the superior qualifications of the critic-teachers. When college graduates, as with us, are put in charge of classes, and left to work out their own salvation, it happens, alas, that too many fall by the wayside. To say nothing of the discouragement and positive injury done to the college graduates themselves by being left alone to struggle with their environment, the children are the principal sufferers. I am of the opinion, therefore, that, on the whole, our practice is wrong, and that we shall be compelled hereafter to license and appoint no college graduates without previous successful experience or adequate professional training. And this leads me to speak briefly on the question of what professional training ought to be required of college graduates.

In his paper, read Tuesday morning, Professor Hanus, of Harvard, spoke of teaching as a profession. We are safe, then, in calling teaching a profession. Now, to enter any profession, a certain amount of professional training is always requisite. This training can be acquired in two ways, namely, by experience and by education in a professional school.

There are a few colleges — I need not name them — that may fairly be considered professional schools for the training of teachers; but the number is small. I think we made the mistake in Newark — and Dr. Balliet will bear me out on this statement — in not discriminating properly between those colleges that are and those that are not professional training schools for elementary teachers. We should have accepted the graduates of some colleges and refused others. There are some colleges that make no claim to be institutions for professional training of any kind. Thus Smith College states in its catalog: "The college is not intended to fit woman for a particular profession, but to perfect her intellect so that she may be better qualified to do well her work in life, whatever that work may be." The broad, general culture that an institution such as Smith College gives its graduates is, without doubt, greatly needed in our elementary schools. But is that enough? Is not something needed besides? And how shall we get it?

A short time ago I prepared and sent out a letter to twenty graduates of colleges teaching in elementary-school positions in the city of Newark. The letter read:

Be good enough to answer, with candor and fullness of detail, the following questions:

1. Did your college training, in any way, fit you for an elementary teacher?
2. Did your college training fail, in any way, to fit you for an elementary teacher?
3. What can you suggest to improve existing conditions?

These letters, as I have stated, were sent to twenty graduates, teachers under my charge, and from the replies received I have collated the following data:

Number of replies received	20
Males 3; females 17.	
Number of colleges represented	14
Among these colleges were Harvard, Yale, Smith, Vassar, Wellesley, Mt. Holyoke, Oberlin, Woman's (Baltimore), etc.	
Average experience in teacher, 3½ years. Principal's record of efficiency, the same being confirmed by supervisors' reports, was as follows:	
Excellent, equivalent to 90 per cent. to 100 per cent	3
Good, equivalent to 80 per cent. to 90 per cent	6
Fair, equivalent to 70 per cent. to 80 per cent	4
Poor, equivalent to below 70 per cent	7
Total	20

I will read you one of these letters, which is a fair sample of the naiveté and candor of them all. It is the letter of a Vassar girl who has the possibility of making an excellent teacher:

My dear Mr. Poland:

My opinions on the questions you put me are based upon the weak foundation of a short personal experience, unaided by discussions with college girls similarly placed, or by any systematic review of the subject. My point of view was not that of fitting myself for a life-work of teaching. Like a great many other college graduates, I was simply trying to keep busy until I could decide upon the work to which I could put my best energy. I taught in the summer school because I am interested in settlement problems, and thought that a little immediate contact with the class involved would outweigh many theories. I asked for substitute work at the high school because some friends at college expressed an unlimited faith in my ability as an inspiring and really phenomenal teacher. I was interested in these supposed dormant gifts of mine. Finally I accepted a position in a low grade, because I am interested in little children and like to have them about me. You see my interest in teaching is hardly that of a professional.

In answer to your first question, I should say that a college training certainly does not unfit a girl for teaching in elementary schools. The fulfilled aim of a college education, I take it, is so to fit and train the mind that it will be able to turn with quickened faculties to any kind of work, and so to fill the life with ideals that every task will be ennobled by the rays of infinite truth received from delving into academic studies. Of course, as to sending a graduate forth armed with the methods, principles, plans, and schedules for any special line of teaching, or any special school, the college makes no pretense at anything of that sort. I hope, for the sake of education, that it never will.

My ignorance of teaching when I first started was supreme. Wordsworth in his "Ode on Immortality" best expresses what I took all children to be. "Trailing clouds of glory" with them, etc. I never dreamed of anything but kind words and sympathy. I was told on the morning of my arrival that I was to have such and such a class. Not another word of help did I have. Here I was without any supplies either mental or material, save filled ink wells and a piazza of cheering children across the alley.

The result was a mob. I thought of my course in French Revolution, and in the afternoon I read some of Carlyle's explosives. I had, in my small way, come in contact with the turbulent masses. It was mine to control them for better or for worse. I would hold them with a grip of iron until I could make them love me. I never had any serious trouble with discipline after that morning. My ideals were not far from right after all. The course of study was equally novel to me. As for methods, I hunted about in the dark, and learned by my failures and mishaps.

Here I should say, in answer to your second question, that I think it quite unlikely that a college girl will ever start as successfully as a trained hand, who has all the tools and implements ready for work. On the other hand, if you suspend judgment in the beginning, I think you will find that through her broader training, her larger common-sense, and her higher ideals, she can give a deeper insight and a more enduring enthusiasm to her work. She has a richer personality to bring to her children. She has all the varied interests of a person of culture. She lives the life of a free man, not the life of a slave to his profession.

Don't try to change the broad and unhampered scope of the college program. Don't try to have a college girl perfect from the start. Give her a fair chance. Give her a better chance than she has had. In the three schools in which I taught I was given only the name of the work I was to do, and a free hand to do it. This was not from lack of time on the part of the people above me, because socially they spent more time with me than would ever have been required for the plan I should suggest.

Give the inexperienced and absolutely ignorant college beginner a plan of the work she is to do, and a good bibliography of suitable and profitable reading matter. Don't put her into a class without any specific knowledge of where she is to begin and how. Give her a few sample lessons, and earnestly criticise her work. Don't put her into the worst school in the city, and into the worst class there is in that school. Take a little trouble with her in the beginning. I am sure she will be worth it as her work progresses. She will at any rate bring fresh and larger points of view than are possible for a girl who has never left her native city, and has taken up a course in teaching with only a high-school education as the foundation of her intellectual life. It is here that I think a great part of the difficulty lies. Of course, up to this time college girls have not thought of teaching in the lower schools permanently, and have taken up the work only as a stepping-stone to a higher position.

You have asked me to speak frankly. I have done so with pleasure. I know that you will understand that I am not speaking with any feeling about the way I was treated. I have always met with friendliness personally. I had to hide the fact of my being a college girl under a cloak, however, and that is not the right way. I am speaking with a special thought of the college girls who will succeed me, and especially of those to whom it means a living. Their ability ought to be properly valued. A fair and proper start means a great deal.

Very sincerely yours,

—— ——

February 17, 1902.

Coming now to the letters received: In reply to the first question, "Did your college training fit you in any way for an elementary teacher?" the following replies were made: yes, 16; no, 4. By those who answered "Yes" the following specifications were made:

Afforded me a broader general culture	8
Gave me a deeper insight into life, etc.	4
Trained to greater versatility and adaptability	5
Developed originality of thought and action	2
Cultivated sense of proportion	2
Gave me power to grasp essential meaning of studies	2
Developed my judgment and reasoning powers	3
Enlarged the horizon of experience	5
Created higher ideals of aim and conduct	2
Produced a deeper and richer personality	2
Developed general resourcefulness for emergencies	3
Produced greater polish of manners	1
Inspired deeper purpose and joy in life	1

Granting, as I believe we may, that all the foregoing statements are true, they show conclusively that real benefits are derived from a college training.

As I have said, there were four who answered the foregoing question in the negative. These specified as follows:

Alienated me from children and children's interests	40
Developed a positive dislike for elementary teaching	3
Served, by bad models, to fix bad habits of teaching	3
Made me feel above teaching little children	3

In the answers above, brief as they are, we have, I think, the satisfactory explanation of the causes of failure of many college graduates when such graduates begin elementary teaching with neither experience nor professional training.

In answer to the second question, "Did your college training fail in any way to fit you completely for an elementary teacher?" the following replies were received:

Did not help me to discipline	8
Left me ignorant of elementary-school studies	10
Afforded me no opportunity for child study	10
Gave me no knowledge of methods	9
Taught me no pedagogical principles	5
Developed tendency to soar above heads of children	5
Gave me no chance to specialize rightly	2
Failed in a practical way	1
Led me to expect too much of children	2
Emphasized "pouring in" process	4
Taught subjects, not pupils	1
Made me impatient of children's stupidity	1
Gave no knowledge of general details of teaching	2

I submit to you that the above is a pretty just estimate of the shortcomings of the average college as a professional training school for teachers. It is a judgment, at any rate, passed upon college training, not by a superintendent of schools, not by Mr. Balliet, for instance, nor myself, but by those who had enjoyed it and suffered from it.

In reply to my inquiry, "What can you suggest to improve existing conditions?" I got the following replies:

A college training should be supplemented by college settlement or other similar experience.	5
Should offer elective courses in pedagogy, including methods	14
Should give opportunity for child study	5
Graduates should attend normal school at least one year	4
Colleges should give less lecture instruction with stereotyped form of questions	2

On the other hand, the elementary schools

Should try college graduates in small classes at first	2
Should pay more attention to culture and less to mechanical work	2
Work in lower grades should be specialized	3
Fewer subjects should be required of college graduates	2
Should have less fussiness and less insistence on petty details	3

The foregoing is by no means a complete summary of the suggestions made, but will indicate the general trend. One thing, at least, stands out with great prominence as the result of this study, and that is the general realization on the part of these graduates of colleges that they had, upon graduation, something yet to learn in order to teach successfully in our elementary schools.

I have sometimes thought that the greatest difficulty of the college graduate, on beginning to teach in an elementary school, is "to find" himself. His college training leaves him bewildered, confused, distracted, when put back again into the presence of children, and face to face with the problems of the elementary school. He finds his horizon has somehow grown marvelously smaller. Instead of the boundless horizon toward which he has been straining his eyes for four years or more, he is now required to limit his field of vision to immediate child interests and the definite ends of primary teaching. To reverse the telescope that has been trained so long upon the starry skies, and to fix the gaze upon the uninteresting surroundings of a primary schoolroom — alas, how distressful to the ambitious graduate! In this bewildered and discouraged state of mind, the college graduate, teaching for the first time in an elementary school, turns somewhere for help. Naturally he first seeks to recall his own experiences as a pupil. But these experiences have been dimmed by the intervening years since he was a pupil of an elementary school. He finds little to help him there. Then he turns to the course of study; but this, as a rule, is too general to afford him much aid. He is too proud to ask assistance of his associate teachers — graduates, perhaps, of a normal school. Possibly the principal may come to his rescue, but this is not always the case. There are principals who assist drowning teachers and others who do not. It is more than likely that the despairing college graduate will turn to his alma mater and to his more recent, and hence better-remembered, experiences for solace and guidance.

But the lecture system so prevalent in colleges, the method of text-book study and memoriter recitations so generally in vogue, these are bad models for him to follow. The "pouring in" process is now begun, the graduate talks over the heads of his pupils, and the irrepressible conflict goes henceforth unhappily on. It is only after weeks and months, sometimes years, of the most painful experience that the college graduate at last "finds" himself and emerges from this chaos of bewilderment and defeat. *He has been getting his normal-school training.* How much better to have got it before he started to teach! This is the point I wish especially to make.

The teacher who began teaching without previous technical training is in exactly the same position as the graduate of medicine who begins his practice without any previous clinical experience. In the case of the medical graduate, however, he is not likely to have at the outset many patients to practice on. But the college graduate that becomes an elementary teacher is put at once into full practice, that is to say, into charge of a full-sized class of pupils to discipline and instruct.

But what is the end of all this? In my judgment superintendents should not be asked or expected to take college graduates into the elementary schools until after some preliminary training to fit them for elementary teaching. But where shall this preliminary professional training be got — in the college or in the normal school? That is for the colleges themselves to say. Unless the colleges, by postgraduate or other courses, furnish adequate and satisfactory professional training, both theoretical and practical, we must turn, much as I regret it, to the normal schools exclusively for our supply of properly trained elementary teachers.

SUPERINTENDENT EUGENE BOUTON, Pittsfield, Mass.— The plan of requiring college graduates to get practice before they enter the grades is a good one, but where the salaries are small these grades would be deprived of the services of college graduates. It seems to me that the presence of some college graduates in a corps of teachers is desirable, even if their technical training is not altogether perfect at the beginning. In the small town, special training was given to college graduates and normal graduates before they entered the regular work. The superintendent placed them in this special training class until vacancies might occur.

SUPERINTENDENT A. K. WHITCOMB, Lowell, Mass.—The normal school is not the only possible place to get practice for teaching. In our own city we have such an apprentice school; in the present class of that school one-third are college graduates. We pay these young ladies three hundred dollars a year while they are serving the apprenticeship. Under this training they have usually made very satisfactory teachers before the close of the year.

SUPERINTENDENT WILLIAM F. SLATON, of Atlanta.— I have heard of no city managing as we manage in Atlanta. I believe we have a good plan. We have there supernumerary teachers. I have been superintendent there twenty-three years, and we have tried various plans. Occasionally we have made failures, but the plan of the last five years has been a success. We elect without pay for this list of supernumeraries. There is a special teacher for the eighth grade; there is also a super [illegible] teacher who is a graduate of a high school. We have twenty-three grammar schools. The supernumerary is required to teach two years before being eligible to election. If she has had two years' experience elsewhere or has taken two years in a normal school, or one year in a normal and has taken the professional examination, she may be elected. The question is asked why do we not pay her. I answer by asking: "Why do you not pay your students in the normal school?" She is getting an education, as is the case of the college student.

Last year I was in a town school, and one of the teachers said she wanted to come to Atlanta. She said that one of her recommendations was that she never went to a normal school. She said that the normal schools placed their students like cogs in a wheel, and she wanted to go to Atlanta instead and serve as a supernumerary. There she could have training given by twenty-two experienced teachers. Grade meetings are called by us normal schools, and they meet every Saturday for discussions.

STATE SUPERINTENDENT FALL, of Michigan.—We have in our state a law which permits colleges to incorporate into their course a limited normal training course; because of that fact they are authorized to grant a probationary certificate, good for four years, which after successful experience becomes a life certificate. The real reason for my speaking is that I see improvement coming to the teachers in the colleges. I have noticed in the colleges a lack of willingness to discuss pedagogical problems; here in the presence of a large body of students preparing to teach, the college faculty must recognize the importance of training to teach.

H. R. SANFORD, state institute conductor, New York.—I wish to answer for the state superintendent of New York, in his absence. We have sixteen cities in each of which is located a training school, admission to which is on a high-school or a college diploma. We have ninety smaller schools in the villages, where the admission is not so high. We have thirteen colleges whose diplomas lead to state certificates. I should like to hear from Principal Downing.

A. S. DOWNING, principal of New York Training School for Teachers.— The sixteen cities mentioned by Dr. Sanford are not supported by the state, but are under the provisions of a state law, which says that no one shall be allowed to teach in a city employing a superintendent unless he shall be a graduate from a high school, and subsequently have had three years' successful experience in teaching, and have graduated from a training school with a course of not less then thirty-eight weeks. No city can employ any primary or grammar-grade teachers not having such qualifications. The state contributes a dollar per week per capita for each pupil during the thirty-eight weeks. The city of Buffalo pays for the support of its training school many times what it receives from the state, and the city of New York supports two training schools, one in Brooklyn and the other in New York, and pays very many times what the state contributes.

The main proposition is one of the very greatest interest to us. The mistake is, it seems to me, in the lack of encouragement from the college men and women to the graduates who go into the elementary-school work; and there has come into the mind of the college graduates the idea that it is discreditable to work in the elementary grades of either city or village schools. It seems to me that it should be pointed out to them that the field in which they can accomplish the most good is in the primary and grammar schools. In New York city a regulation now exists that to teach drawing, for instance, the person must be a college graduate. It is almost impossible to find a candidate for that position, because drawing has been a subject largely taught in the elementary schools, and it is almost impossible to find a woman who has thought it worth while to take her college course to prepare to teach drawing in the grades. When it comes to the question of methods in music, that is also an elementary-school subject, and you will find very few who have devoted their time to methods of teaching music to children. I regretted to hear the statement made that no college graduates could be employed in a certain city unless certain conditions be complied with. Take the college graduate without examination; select that graduate who appears to have the spirit of a teacher and assign her to a grade as a temporary teacher, or whatever you may please to call her, and require her to do work in the training class, and encourage her to come to that city. Say to her: "We do not expect you to be a good teacher at the beginning, but we will help you to become a good teacher." In a training school in New York city only three years old we have had and are now having graduates taking the full three-years' course. If they are able to do the work in theory in less than a year and a half, we will let them, at the end of a year, have two and a half dollars a day for ladies, three dollars for men, for substitute work. Until they have demonstrated to the satisfaction of the faculty after one and a half years of observation that they are endowed with the spirit of a teacher, and have the ability to maintain discipline while conducting their work, they can never get their names on the eligible list in the city of New York. I believe, on the main question, that it is really time that something be done, not to discourage, but to encourage, college graduates to take up the work of teaching in the elementary schools.

SUPERINTENDENT WILLIAM J. M. COX, Moline, Ill.—I should like to ask some of the superintendents who have had experience whether, in their judgment, it is wise for a city to support a training school of, say, one or two instructors, into which high-school graduates are taken, and where they have pure methods of teaching during a year or a year and a half, and then fill the places of grade teachers with these students, where college graduates cannot be employed.

E. O. SISSON, Bradley Institute, Peoria, Ill.—A good deal has been said about difficulty in getting practice-teaching. We all got that, and the majority of us here never had normal training. The question is not so much of getting practice-teaching as observation and consultation. The opportunity to look upon a skillful teacher's work as the medical student looks upon the work of a skillful operator is what we need. Then, after the class is over, we need the opportunity to ask the skillful teacher why he did this, and thus come to an understanding of the processes he employed.

PRINCIPAL DOWNING.—The gentleman is right, but the difficulty is that the method to which he refers lacks educational value. By this method the work done by the critic-teacher resolves itself into mere criticism of a subject taught by the student-teacher. Students in our training schools are obliged to do systematic work in answering questions, etc., for an interval of one hundred hours during the period for the study of theory and practice. A number of questions are given them touching the construction of the course of study. The course of study is then taken up from the standpoint of the child. Students are led to discover what the child should know upon his entering the recitation. When student-teachers are prepared to answer questions touching the foregoing topics, they have some knowledge of how to proceed in the schoolroom.

DR. E. E. WHITE, Columbus, O.—The questions put by several superintendents regarding the kind of work being done in a number of training schools have caused me to wonder whether or not the work of the real training school is as helpful as it ought to be. The training school should avoid making the teacher a mere follower. I know of some training schools in Ohio that are extremely mechanical—mere machine makers; but I am pleased to note that these are not in the majority. I have in mind a training school in Cincinnati that is not a mechanical school. Here methods are outlined, and teachers are not merely prepared to imitate their instructors, but are grounded in the principles underlying the best methods of school instruction. When a teacher has become thus indoctrinated, she will go into the schoolroom and work out her own views with soul and spirit in her work. I would not, if I could, prescribe a method for a teacher. The teacher must determine the method she can use most successfully.

There is a tendency in some training schools to conform too much to patterns—mere copy work. No teacher who follows a pattern can touch a human soul. Teachers are not always to blame for doing this mechanical work. They are often discredited because the principal happens to be a pattern-man. The teacher who teaches her own ideas under proper limitations will grow and become strong; she will not fail to touch human souls — human lives.

The college gives knowledge and technical principles of teaching. The college can not be a real training school. It may be a help to those who are seeking higher places.

THE PSYCHOLOGY AND ETHICS OF FUN

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A German philosopher has said: "Humor is the eudæmonological pessimism which includes within itself a teleological evolutionary optimism, which may cause a realistic, radical, and universal reconciliation to appear as possible."

This quotation, encountered in some piece of fugitive literature, I have not attempted to trace or to identify, but it sounds suspiciously like Hegel. In this connection, and for a purpose which does not immediately appear, but which, I trust, will be made apparent in the sequel, I here reproduce (without implying approval) Schopenhauer's estimate of Hegel:

> In our German philosophy intellectual intuition and absolute thinking have now taken the place of clear perceptions and honest investigations. To impose upon the reader, to bewilder and mystify him, and by all sorts of contrivances throw dust in his eyes — that is our method now; that, and not truth, is the expositor's leading aim. In consequence of this, philosophy, if we are still to call it so, could not but sink into ever lower depths, till at last the lowest stage of degradation was reached by Hegel, who, to stifle again the freedom of thought won by Kant, turned philosophy, the daughter of reason and future mother of truth, into an instrument of obscurantism and protestant Jesuitism, but in order to hide the disgrace, and at the same time stupefy men's brains to the utmost, drew over her a veil of the emptiest verbiage and most senseless hodge-podge ever heard out of Bedlam.*

Schopenhauer's account of our subject is more in accordance with the commonly received definitions than the one first above given. In *Welt als Wille* (I, sec. 13) he says:

> Laughter never arises from anything else than a suddenly recognized incongruity between the conception and the real object that in some respect or other has been thought through it, and is in itself simply an expression of this incongruity. The greater, the more unexpected in the apprehension of the laugher this incongruity is, the more violent will be the laugh.

WHY THE SUBJECT IS CHOSEN

The fitness of this topic for the consideration of educators does not require to be vindicated. More trouble comes to those who are in charge of the training of youth, especially to those responsible for discipline, from what is called mischief or fun than from any other source. College presidents, school superintendents, and teachers would sleep sounder and breathe easier if they could take out a policy of insurance against outbreaks of this nature. It is not reassuring to find in the replies to the questionnaire sent out by Dr. G. Stanley Hall and Mr. Arthur Allin that, among the things specified in the highest percentage as amusing, were these: a goose placed in a teacher's seat and pins stealthily inserted in teachers' chairs. There is this striking difference between the offenses with which the administrator of discipline has to deal: if they spring from fun, then, no matter how disorderly or troublesome be the case, it is considered by the culprit a complete defense to say that the act was done "just for a joke," while, for an act done otherwise, it would never occur to the offender to plead that the act was done "just for anger" or "just for spite." "Just for fun" seems to rule out of consideration all reference to the moral law. When a noted politician said some years ago that the Ten Commandments and the golden rule had no place in politics, he expressed about politics what is generally accepted as true, especially by the young, about whatever is done in the name or under the plea of mirth or mischief. Charles Lamb has suggested that the leading element in the enjoyment of certain forms of comedy consists in the fact that they free us from the burden of our habitual moral consciousness. Those whom Kipling calls "grown ups" are, in this respect, but children of larger growth. One purpose of the present paper is to draw attention to this claim of exemption on the part of fun from the moral law, and to point out some of its consequences.

ORIGINS

The topic must first be genetically treated. It is necessary to admit at the outset that the sources of this Nile remain undiscovered. So little is definitely known on the subject that in the ordinary manuals or textbooks on psychology the topic is wholly ignored. Hall and Allin (*American Journal of Psychology*, Vol. VIII, No. 40) say: "We are persuaded that all current theories [on the subject of the psychosis of laughter] are utterly inadequate and speculative, and that there are few more promising fields for psychological research." Of their own work, the first undertaken in accordance with modern methods, they say: "It is so inadequate to the vast and hitherto unsuspected complexity of the subject that it can hardly claim to be more than notes calling attention to the need for further detailed work." Accepting these statements as coming from high authority, the present paper, whatever may be its faults, will at least be free from that of dogmatism.

Let the mind run over the list of words suggestive of this subject: banter, blithe, burlesque, caricature, chaff, comic, derision, drollery, frolic, fun, glee, grotesque, hilarity, humor, irony, jeer, jest, joke, jovial, ludicrous, merriment, mirth, mockery, quip, quirk, pleasantry, raillery, rally, retort, repartee, ridicule, sarcasm, sardonic, satire, scoff, smile, sneer, sport, tease, taunt, travesty, wag, wit, whimsical. These words have set the consciousness traveling in brain-paths of very different directions, some pleasant, some painful. We find Sidney Smith saying in one place that wit and humor are "the oil of life," given to man to "charm his pained steps over the burning marl;" in another place we find him saying: "I wish, after all I have said about wit and humor, that I could satisfy myself of their good effect upon the character and disposition, but I am convinced that the probable tendency of both is to corrupt the understanding and the heart." Can the same fountain send forth waters both bitter and sweet? Can philosophy penetrate thru this diversity to unity? Or must we not seek diverse origins for effects so variant?

ANIMAL EXHILARATION

Beginning with the animals, the better opinion seems to be that something akin to human laughter may be observed in their antics, pranks, and capers. If the motion of the head has given us one of our names for the "wag," why may it not be true that the dog laughs with the wag of his tail? A young colt driven out of a pasture, if not too closely pressed, will approach the gate as if about to dart thru it, when he will suddenly wheel and scamper off to the remotest end of the field, and then return to the gate in a mad run, wheel again, repeating the sport until he is forced thru the gate or becomes tired of the frolic. This is pure animal spontaneity expressing itself in a way that is pleasurable and suggestive of glee. Children seem to possess an enormous over-provision of stored-up activity or innate animal spirits, and laughter is one vent or safety valve for this exuberance. In adults the same feeling is the physical exhilaration of realizing existence as a joy, which comes to all healthy natures when out of doors. Now, one invariable characteristic of this exhilaration, especially when felt in a high degree of intensity, is the feeling of power, of exaltation, and (lacking a better word) expansiveness. It is physical megalomania. He is not to be envied who has not felt in such moods that he could vault over a mountain or leap the gorge at Niagara, or get the best of a mogul engine in a head-end collision. Now, if physical vitality supplies this enjoyment in "these degenerate days," how much more intense and thrilling must the same sensation have been in the "good old days" of animal development unhampered by civilization; when the human foot, for instance, before it had been shut away from the fresh air for centuries in bandages of cloth and the strait-jacket of leather, might know the joy of the elastic spring in the dance or the leap, which was one of the natural manifestations of this physical ecstasy. Is not provision here made in this feeling of power, exhilaration, and expansiveness for association of ideas between merriment, on the one hand, and extravaganza and exaggeration, on the other? May not the partial truth of Hobbes' theory lie at this point, that "laughter is a sudden glory arising from a sudden conception of some eminency in ourselves," etc., which Bain interprets thus (*Mental Science*, 316): "In other words, it is an expression of a pleasurable feeling of superior power." Is this, in part, the "freedom or caprice of subjectivity" which Dr. Baldwin gives as a summary of the theories of Schlegel, Schelling, and Hegel? Burlesque is one of the earliest forms of the comic. Children relish *Gulliver's Travels* without a thought of the ulterior satire intended by the Brobdignags; and probably such scenes as those in which Pantagruel combs cannon balls out of his hair as he walks off the battlefield have afforded enjoyment to readers who never troubled themselves with the interpretation of Rabelais. It is said that the witticism which produced more laughter than any ever heard in the House of Commons was that of Sir William Windham, who exclaimed to an audience familiar with the slow movements of the English court of chancery: "Talk of taking Antwerp with thirty thousand men and twenty ships of the line by a *coup de main!* Good God, sir, you might as well talk of a *coup de main* in the court of chancery!" The wit lies in the hyperbole. Exaggeration is said by so good an authority as the late S. S. Cox to be the chief characteristic of American humor. It is illustrated by the patriotic geographer who said that America is "bounded on the north by the aurora borealis; bounded on the east by the history of the past; bounded on the south by the torrid zone; and bounded on the west by the day of judgment." The explanation here attempted may be, and doubtless is, inadequate. The only suggestion is that the explanation finally accepted must have the merit of accounting thru a pleasurable association, amiable in its tendency, for those forms of wit and humor which in their origin could hardly be kindred to the sources of satire, sarcasm, irony, jeers, raillery, ridicule, and all those forms of the ludicrous which are impossible without a victim. These types of wit and humor will now require attention.

IS CRUELTY THE SOURCE?

George Eliot says in her essay on Heine that probably the enjoyment of the ludicrous is a development of the savage delight in witnessing torture inflicted on an enemy. She recognizes, however, the possibility that the pleasure thus derived may be refined and sublimated so as to lose all trace of its origin; for in her *Choir Invisible* the prayer for impersonal immortality runs (in part):

> May I reach that purest Heaven,
> Enkindle generous ardor, feed pure love,
> Beget the smiles that have no cruelty, etc.

While George Eliot's theory is inadequate as an explanation of the whole subject, it deserves consideration; for George Eliot was a psychologist in the same sense that Shakespeare was a psychologist. In what, then, do savages delight that bears resemblance to the modern enjoyment of the ludicrous?

The American Indian was a taciturn creature, but he relished taking the scalp of his foe, making his captive run the gauntlet, or writhe at the stake. The Roman populace enjoyed the humiliation of the enemy in the spectacle of the triumph, and reveled in the bloody gladiatorial combats. The Mexican and Spaniard of today are entertained by the bull-fight, and if a luckless toreador is landed on the horns of the infuriated bull, it is "great sport." How easy it is to translate these forms of savage or semi-civilized amusement into modern conceptions! Beginning with the last illustration, what is it but a refinement of the same cruelty when we delight to see one disputant "impale another on the horns" of a dilemma? What will so quickly crowd the galleries of the Senate as the announcement that there is to be a "tilt" between two sharp-tongued senators; and what is such a scene except a gladiatorial combat on an intellectual arena? When a mob jeers or taunts some unpopular personage, what is the ordeal but his running a gauntlet where invective and sarcasm take the place of tomahawks? When in repartee or retort the victor glows with satisfaction in beholding the confusion and shame of his conquered antagonist, what is this but a more refined gloating over the writhings of an enemy at the stake? When on one occasion a small boy, under pretense of throwing a bouquet to an undergraduate speaker on the stage at commencement, aimed at the head of a pompous trustee and knocked off his wig, did there not dangle from his belt a veritable scalp? What was the West Point hazing but modified barbarism? What is a practical joke, in its roughest form, but unmitigated savagery?

As the former theory found some support in Hobbes' account of the subject, the present contention is sustained by the partial truth embodied in Bain's definition. He says: "The occasion of the ludicrous is the degradation of some person or interest possessing dignity in circumstances that excite no other strong emotion." Bain cites in support of this Quintilian: "A saying that causes laughter . . . . is never honorable to the subject of it." He does not cite a still more pointed paragraph in Cicero, *De Oratore*, as follows:

> As regards humor, there are five points to be examined: what it is; whence it is; whether it is the orator's part to wish to raise a laugh; how far; what are the classes of humor. And that first, what the laugh is, how it is aroused, where it is, how it starts and breaks out so suddenly that we cannot restrain it when we would, and how it seizes on the sides, the mouth, the face, the eyes, all at the same time — let Democritus see to it. For it has nothing to do with the discussion; and if it did I should still not be ashamed not to know, because even those who profess to know do not. Now the ground and, so to say, the region of the ridiculous lies in some baseness or deformity. For the sole or principal things which are laughed at are those which mark and point out, but not in a base way, some baseness.

A little negro bootblack picked up on the sidewalk the stump of a cigar and, walking into a store, politely said to the proprietor: "Mister, please gimme a match." "Get out; we don't give away matches to trash like you," was the reply. The little gamin walked out, earned another nickel by a shine, returned to the store, bought a box of matches and lit his treasure trove. He then handed the box back to the proprietor with the remark: "Please put that box on the shelf, and next time a gen'l'man axes you for a match, give him one out of my box." We enjoy seeing the impolite adult degraded to his true position below the level of the street arab in the qualities of a gentleman. On one occasion Douglass Jerrold saw a pompous magnifico walking on the other side of the street. He walked over and said to the impersonation of importance and dignity: "Pray, sir, I would like to know if you are anybody in particular." J. L. Ford, as quoted by Hall and Allin, says:

> Careful study of the work turned out by professional joke-makers reveals the fact that fully nine-tenths of their humor is founded on the simple idea of disaster or misfortune. Nearly all primitive humor is founded on this simple idea. In the English pantomime, in which many of the most ancient forms of jest are so firmly imbedded that they are in as fine a condition today as they were under the reign of the Merrie Monarch, all the fun depends upon indignities heaped upon the different characters. For a great many years nearly all our national humor had for its foundation the mother-in-law, the goat, the stove-pipe, and the banana-peel.

Heine, lying on his "mattress grave" in a delirium of wit, transferred this conception of the enjoyment of suffering in true anthropomorphic fashion to the divine being:

> What avails it me that enthusiastic youths and maidens crown my marble bust with laurel when the withered hands of an aged nurse are pressing Spanish flies behind my ears? What avails it me that all the roses of Shiraz glow and waft incense for me? Alas! Shiraz is two thousand miles from the Rue d'Amsterdam, where, in the wearisome loneliness of my sick-room, I get no scent, except it be, perhaps, the perfume of warmed towels. Alas! God's satire weighs heavily on me. The great author of the universe, the Aristophanes of heaven, was bent on demonstrating with crushing force to me, the little, earthly, German Aristophanes, how my wittiest sarcasms are only pitiful attempts at jesting in comparison with his, and how miserably I am beneath him in humor, in colossal mockery.

A kindly commentator says of this:

> It is not for us to condemn who have never had the same burden laid on us. It is not for pigmies at their ease to criticise the writhings of the Titan chained to the rock.

Since this paper is not scientific in aim, but has a practical purpose, it may be well to establish by further considerations the anti-social nature of the ludicrous, the ultimate object being to make an argument that our homiletics—in the pulpit, press, and schoolroom—should endeavor to bring about a moralization of wit and humor.

MORALIZATION OF MIRTH

1. The testimony of language. Talleyrand has said: "Language is the wisdom of everybody." Words are composite photographs of myriads of individual mental images. Whence, then, comes our vocabulary when we describe the various types of wit and humor? Usually from the metaphors of weapons, warfare, and combat. We say of wit that it is keen;

that its blade is sharp or trenchant; a jest is cutting; if successful, it scores a hit; and the one word to be applied in common to all the "thousand shapes wit wears" is point. Now, the function of a point is to stick into something, and the process of puncture is usually painful and most frequently malevolent. When we abandon the metaphors suggested by arrows, swords, and spears, we resort to such terms as bitter, caustic, stinging, blistering, excoriating, etc.

Arguments from etymology are peculiarly liable to error, but some suggestions of painful or cruel physical processes are probably indicated in the origin of various terms now in question. Dean Swift says of "banter": "This polite word of theirs was first borrowed from the bullies in White Friars." Its local meaning in the United States is the challenge to fight or race, and hence the contest itself. In "jeer" there is a suggestion of shearing the fool. In "rail" is a suggestion of scraping or grating. "Sarcasm" is from σαρκάζω, "to tear the flesh," then "to bite the lips," then "to speak bitterly or sneer." By popular etymology the idea of sarcasm as biting to others may have been thus derived.

2. All the phenomena of repartee and retort and (acrimonious) debate tend to show that wit is a species of warfare. In the freedom of invective in the Irish House of Commons a century ago, Mr. Martin, of Galway, said of Mr. Ponsonboy, at a time when he knew that Ponsonboy's sister, one of the most beautiful women in Dublin, was in the gallery: "Mr. Speaker, these Ponsonboys are the plague of the nation. They are infamous personally and politically, from the toothless old hag now grinning in the gallery to the white-livered scoundrel that shivers on the floor." It is not a far cry from such brutality back to Sparticus on the bloody sands. For a modern instance, let Mr. Blaine's tilt with Mr. Conkling suffice. Someone had said that the mantle of Henry Winter Davis had fallen on Mr. Conkling. Mr. Blaine said the comparison was a profanation—"Thersites to Hercules, Hyperion to a satyr, mud to marble, a whining puppy to a roaring lion, a singed cat to a Bengal tiger." And to this very day a certain senatorial "pitchfork" is the chief attraction of the galleries and the prime favorite of sensational reporters. Of how few debaters possessing wit can it be said as of Canning:

> His wit in the combat as gentle as bright
> Ne'er carried a heart stain away on its blade.

Schopenhauer's hot blast against Hegel was introduced in the beginning of this paper as a test. Was it amusing in its ferocity? If so, we are ready for the Q.E.D. A writer in the *Cornhill Magazine*, May, 1876, says:

> Of the current jests half owe their merit to their inhumanity. Look at any of the current stories of Douglass Jerrold, who passed for a humorist in these later days. Every recorded jest of his that I have seen is a gross incivility made palatable by a pun. The substance of each phrase is, "You are a fool;" the art consists in so wrapping the insolence in a play of words that the hearers laugh, and the victim is deprived of sympathy.

"It was your father, then, who was not so handsome," is one of Talleyrand's brilliant retorts to a man who spoke of his mother's beauty. What is this but to say, "You are an ugly beast," and yet to evade the legitimate resentment of the sufferer?

Talleyrand, visiting at the bedside of someone quite ill, asked the patient how he was. "I am suffering," was the reply, "the tortures of the damned." "What," said Talleyrand, "already!"

3. Strong corroboration of the argument is found in the case of children. Hall and Allin state that the returns to their questionnaire abound in instances of childish glee over all sorts of deformity, suffering, and calamity. In perverted cases this normal mirth rises into the heartlessness of the little girl who danced over a comrade's grave, and of two little boys, aged nine and eleven, who, after witnessing scenes of butchery one day, killed, dressed, and quartered their baby sister, imitating with great delight the details they had seen.

The advanced proofs of the second volume of Baldwin's *Dictionary of Philosophy and Pedagogy* enable me to cite an opinion more charitable to human nature. Under the article "Malevolence," Professor Sorley says:

> It is interesting to ask whether there is not an æsthetic factor in malevolence, as there is in most benevolence and sympathy. There can be no doubt that many of the actions ordinarily ascribed to malice are better explained from the elements of play and of the comic involved in the production of grotesque and unusual situations. . . . . It may be the writhings and not the pain of the pinned-down insect that interests.

The present writer would prefer to believe this rather than what he does believe, but do not our recollections of experiments in infancy with pins and insects candidly force us into the position of the old lady who said that, no matter what other doctrines she gave up, she intended still to hold on to her original depravity? The difference of opinion suggests that kindergarten experts and all those interested in child study should pursue the investigation for which Hall and Allin's circular of inquiry blazes out the way.

4. The child of the preceding paragraph is but the father to the man in this. To laugh with those who weep is a gross perversion of scriptural teaching, but joy in the calamity of others (*Schadenfreude*) is one of the deep, dark secrets in the soul of man. There are secrets of this character that remind us of the French saying: "But for sleep men would die of self-contempt." Why is it that grotesque and wanton images present themselves in the minds of holiest saints at the moment of intensest devotion? Who has not confessed with shame his consciousness of the half-truth in Rochefoucauld's maxim: "There is something in the misfortunes of our best friends which does not more than half displease us"? Who has not witnessed the disappointment on the face of those who inquire about the condition of someone, long expected to die, when they learn that the dénouement has not come? Hall and Allin on this painful subject say:

> Not a few of our correspondents confess, with genuine abasement, that, interlinked with the strong feeling of grief at the sickness and death of their friends, there is an undercurrent of satisfaction and even joy, which sometimes makes them feel that their sorrow, though tearful, is superficial and hypocritical. . . . . It is sad to reflect upon the results of honest introspection and careful self-analysis upon this subject.

Milder phases of this *Schadenfreude* are perhaps to be found in the following groups: (*a*) Enjoyment of ludicrous epitaphs which bulk large in every collection of jokes. (*b*) The cruel wit of quietism, said to have been begun in 2 Chron. 16:12, 13: "And in the thirty and ninth year of his reign King Asa was diseased in his feet; his disease was exceeding great; yet, in his disease he sought not to the Lord, but to the physicians. And Asa slept with his fathers." In modern newspaper forms this species appears in such paragraphs as the following: "A servant kindled a fire with naptha and has benzine no more." (*c*) Mirth at funerals. In this case the merriment need not be ascribed to any pleasure in the sorrow of the mourners, but it sufficiently illustrates the point to say that sympathy for grief is not strong enough to repress the risibilities. Perhaps the rebound, or relief from tension, may be a large factor in the true explanation. Whatever be the theory, the ghastly fact remains. One such instance occurred as follows: It is known in the local community as the comic funeral. It was the burial of a noted wag, whom we will call Mr. Yorick in order to disguise the setting of the story. The pallbearers, according to local custom, were walking beside the hearse. The first carriage was filled with the tearful wife and children of the deceased. Unfortunately one of the pallbearers raised the question what was the best joke the dead man had ever perpetrated. This called out several enlivening reminiscences, and soon, to their horror, the pallbearers found themselves in a shake. The electric current of wit passed down the procession, and soon dozens of men were laid out along the roadside in spasms of inextinguishable laughter.

5. Our estimate of the funny man may be adduced to support the preceding considerations. Woe to him who, combining wit and wisdom, suffers himself to acquire a reputation for the former! Sidney Smith could not be a bishop. Thomas Corwin was a great man, but people refused to take him seriously. But the discount on the man of wit relates to character even more than intellect; he is regarded as heartless. Those who laugh at his jokes upon others feel that when their backs are turned their turn will come. Southey says didactically:

A man renowned for repartee
Will seldom scruple to make free
With friendship's finest feelings.

Pascal flatly says: "Diseur de bons mots mauvais caractère."

6. Hitherto the argument has sought to illustrate the evolution of the ludicrous from the cruel, but the practical joker with his brutalities has undergone no development. He is a genuine, original, unadulterated

savage. Not infrequently we read in the press dispatches of persons frightened to death by such barbarism, and occasionally of some student who goes to his death in a mock initiation. Hall and Allin say:

> The cheap comedy shows us how the practical joke, banished from the cultivated classes where it formerly held sway, still prevails among the lowly as it does among savages and children in a raw and more flaying form. The greater the discomfiture or even the pain, the madder and more furious the fun.

Our survey of the subject up to this point has shown that there are some forms of wit and humor which are so amiable and harmless as to suggest that they spring from the pleasure of pure animal spontaneity; while others are so malevolent as to give plausibility to the theory that they are derived from savage delight in witnessing torture. This latter proposition it has been sought to make good by argument and clear by illustration, because of the practical corollaries to be deduced from it. If there are smiles that would not mar an angel's brow and others that befit only the faces of fiends, there is ample warrant for the proposition that ethical standards should be applied, and that the plea of "just for fun" should no longer be permitted to cover a multitude of sins. Children learn at an early age the principle of the limitation of individual liberty. It can usually be fixed in the mind by the epigrammatic statement, "My right to swing my arm ends where your nose begins." The beautiful simplicity of the golden rule commends itself to their intelligence; but it would fall upon them with a showerbath of surprise if they were told that the golden rule applies to mirth and merriment. Yet this is precisely the inculcation needed. Since fact is worth more than theory, the present writer can say that in a critical period of administration the day was saved for good order by an expostulation which insisted on the moralization of fun, and which rested the plea on George Eliot's theory of its origin.

The inculcation may take this general direction: After considering all that may be claimed for mirth as a part of human happiness, we may submit that it is bounded by certain higher laws. (*a*) It is bounded by the law of kindness. Whether we would willingly be the victim of a proposed jest or practical joke is an easy test of its compatibility with this law. Conventionally it is assumed that we enjoy hearing our friends tell a "good thing" on us. But who really enjoys the ordeal? (*b*) It is bounded by the law of purity. In the *Cornhill Magazine* article already quoted it is said: "How much that passes for humorous is simply profane, or indecent, or brutal? Half of the humorous stories that pass current in the world are unfit for publication." This limitation may be stressed by an anecdote of General Grant. A young officer, being about to tell a salacious story, said: "I believe there are no ladies present." "No," said General Grant, "but there are gentlemen present." No young officer would have dared to think of telling a shady story in the presence of General Lee. Quaint old Thomas Fuller said: "Almost twenty years since I heard a profane jest and still remember it. How many pious passages of far later date I have forgotten! It seems my soul is like a filthy pond, wherein the fish soon die and the frogs live long." (*c*) It is bounded by the law of reverence. "I wonder, Mr. Spurgeon," said one of his auditors, "that you use so many witticisms in the pulpit." "You would not wonder," was the reply, "if you knew how many I suppress."

CAN WIT BE CULTIVATED?

Of wit at its best estate George Eliot has given the best definition; it is "wisdom raised to a higher power." Its swift insight is of great intellectual value. In debate it economizes time. Argument must be met with argument; but to meet sophistry and absurdity with reasoning is to pay them undeserved respect. They should be "speared with a jest," "routed with all the rash dexterity of wit." Tennyson seems to have had in mind this utility of wit when in the "Ode to Maurice" he wrote:

> Not martyr flames nor trenchant swords
> Can do away with that ancient lie;
> A gentler death shall falsehood die,
> Shot through and through with cunning words.

That wit is not capable of cultivation is a notion universally held. It is presumptuous to question an opinion so widely accepted, but it may be that the pure spontaneity of wit belongs to the same sort of myth as the "fine frenzy" of the poet. It is doubtless true that the wit, like the poet, like the orator, is born, not made, and yet labor may play as great a part in the development of the one as of the other. Sheridan's notebooks, when examined by his literary executor, revealed the unsuspected truth that many of his brilliant witticisms were the fruits of laborious cultivation. For instance, one of his epigrams can be traced thru the successive stages of its evolution. In its first form it appeared thus: "He employs his fancy in his narrative and keeps his recollection for his wit." At a later period it appeared thus: "When he makes his jokes you applaud the accuracy of his memory, and it is only when he states his facts that you admire his flights of imagination." Sheridan would not fire off the witticism in either of these forms, because they were not satisfactory to him. He reserved the final explosion for the time when the epigram took this shape: "The right honorable gentleman is indebted to his memory for his jokes and to his imagination for his facts." Curran, who was the author of more *bon mots* perhaps than any man that ever lived, even in Ireland, the land of wit, told his friend and biographer, Charles Phillips, that all the good things he ever said were thought of beforehand, and that he had laid awake many a night chuckling over his jokes as he invented them, and thrumping the headboard of the bed in his glee, to the infinite annoyance of the other inmates of the house. Washington

Irving tells us "the elaboration of humor is often a most serious task; I have never witnessed a more perfect picture of mental misery than was presented to me by a popular dramatic writer whom I found in the agonies of producing a farce which subsequently set the theaters in a roar." The familiar fact that most of us are able to manufacture a desired witticism when it is too late—as Mr. Lowell said that all his best after-dinner speeches were made in a cab as he rode home after the banquet—suggests that cultivation might quicken the capacity for wit. If the powers of reasoning and of the imagination can be trained thru the study of logic and poetry, as everybody believes, why may not the power of wit be likewise aided by study?

At any rate, it is fortunate that this suggestion, so contrary to the general notion, may be subjected to careful test. Hall and Allin say that we need, among other things, for the psychology of the future "a very careful collection of thousands of the very best ancient and modern jests on cards such as has been begun for ready sorting, until genera and species for some classification on a purely inductive basis shall appear;" also "a very exhaustive review of humorous literature, proverbs, etc., with analytic intent." In other words, they propose a scientific dissection of the joke. There is something inexpressibly droll in this idea of a man of science treating a jest as he would treat a fossil, or endeavoring to discover the protoplasm of wit and humor. Can the point of a jest be investigated under the microscope? Will it be possible to illustrate a witticism on the blackboard? Can a retort be put in a retort and analyzed? It may be doubted whether wit and humor will yield to this treatment; whether we can have an anatomy of pleasantry as old Richard Burton has given us an anatomy of melancholy. May it not be possible that the joke when analyzed may be like a soap bubble when broken—one moment beautiful with all the hues of the rainbow, the next a drop of dirty water?

Every touch that woos its stay
May brush its brightest hues away.

It is always pleasant to end with optimism. Hall and Allin say:

> Some mothers and kindergartners have a little game of laugh because they rejoice in life and to teach gratitude to God, making it thus a form of devotion or prayer. . . . . In wit and fancy, present man is practicing for the higher man that is to be, just as some of children's games are preparatory to the duties and realities of adult life. We must not deem the pleasures of imagination, therefore, or the wider range of possibilities opened by wit, both of which so enrich the hard, stern world of present fact, as entirely without symbolic value as prophecy. These bid us hope.

SPECIAL MEETING

HELD AT MINNEAPOLIS, MINN., JULY 10, 1902

SECRETARY'S MINUTES

THURSDAY, JULY 10, 1902

The Department of Superintendence met in the Lecture Room of the Law Building of the State University at 2:30 o'clock P. M., and was called to order by President Charles M. Jordan, of Minneapolis.

President Jordan announced that a letter from Superintendent Easton, of New Orleans, conveyed the information of conflict between the Mardi Gras and the regular date for the meeting of this department as announced to be held in that city, and of the difficulty of securing guarantees of satisfactory entertainment for the department at that time.

The question was raised whether there should be a change of the date or of the place of meeting. By vote the president was directed to appoint three persons, who with himself and Secretary Shepard should constitute a committee with power to act on the question of time and place for the next meeting, and with authority to change either the time or place, as the interests of the department might direct.

The president announced the names of President Edwin A. Alderman, of Louisiana; Superintendent Alfred Bayliss, of Illinois; and Superintendent Charles R. Skinner, of New York, as members of the committee.

An invitation was presented for the city of Baltimore by the state superintendent, M. Bates Stephens, and the city superintendent, J. H. Van Sickle; an invitation from Hot Springs, Ark., was presented by George B. Cook, superintendent of schools of that city; an invitation from Cincinnati, O., was presented by Hon. L. D. Bonebrake, state commissioner of schools of Ohio; and from St. Louis, Mo., by Ben Blewett, assistant superintendent of schools, of St. Louis. All of these invitations were presented subject to the withdrawal of New Orleans from the candidacy for this meeting.

J. R. Coniff, assistant superintendent of schools of New Orleans, urged that the meeting there be fixed for March or April, so as not to come into conflict with the crowds in New Orleans at the time of the Mardi Gras festival.

There being no other business, the business session of the department adjourned.

ROUND TABLE CONFERENCE

After the adjournment of the business session, Superintendent Helen L. Grenfell, of Colorado, leader of the Round Table Conference of State and City Superintendents, took charge of the meeting.

"The Value of Nature Study in Public Schools" was discussed by President Z. X. Snyder, of the State Normal School at Greeley, Colo., and Hon. L. D. Bonebrake, state school commissioner of Ohio.

Hon. Richard C. Barrett, state superintendent of public instruction of Iowa, read a paper on "Reciprocity in Licensing Teachers."

Hon. Charles R. Skinner, state superintendent of public instruction of New York, presented a paper on "School Maintenance: How Best Provide For."

After a general discussion the conference adjourned.

RICHARD C. BARRETT,
Secretary of Round Table of State and County Superintendents.
J. N. WILKINSON,
Secretary of Department of Superintendence.

The committee to whom was referred the question of place and date of the next meeting of the department in February, 1903, met at the West Hotel, Friday, July 11, and was called to order by President Charles M. Jordan. After an informal discussion, the following resolutions were presented and carried without dissent:

Resolved, That the New Orleans authorities extending the invitation to the Department of Superintendence to hold its meeting in February, 1903, in that city, be given one month from the receipt of notice of this action to secure guarantees of satisfactory railroad rates and hotel accommodations for a meeting of said department to be held in that city at dates not earlier than February 20 and not later than March 9, 1903.

Resolved, That in case the New Orleans authorities are unable to furnish satisfactory guarantees, the next meeting of the department be held in Cincinnati, O., providing the usual guarantees of local accommodations and satisfactory railroad and hotel rates are secured.

The committee then adjourned with the understanding that the adjustment of the questions involved in the above resolutions be left to President Jordan and Secretary Shepard, acting as a subcommittee.

IRWIN SHEPARD, *Secretary*.

ROUND TABLE PAPERS AND DISCUSSIONS

RECIPROCITY IN LICENSING TEACHERS

RICHARD C. BARRETT, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION FOR IOWA

This paper will deal with facts rather than with theories. In order to ascertain existing conditions in reference to reciprocal relations between states in licensing teachers, a circular letter was addressed to each state and territorial superintendent, asking for information relating to the subject. Replies were received from thirty-five states and territories.

In reply to the question, "Does the law of your state authorize the superintendent of public instruction or the state board of educational examiners, as the case may be, to certificate applicants from other states without examination upon presentation of state licenses granted elsewhere?" the following gave affirmative answers: California, District of Columbia, Idaho, Indiana, Michigan, Montana, New Jersey, New York, Oregon, Virginia, and Wisconsin. Total, 11.

The following gave negative answers: Alabama, Colorado, Connecticut, Florida, Georgia, Illinois, Iowa, Kansas, Maine, Minnesota, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, Oklahoma, South Dakota, Texas, and Vermont. Total, 19.

In reply to the question, "Does the law of your state authorize the superintendent of public instruction or the state board of educational examiners, as the case may be, to certificate applicants from other states without examination upon presentation of diplomas of graduation from state universities or other institutions of high rank?" affirmative answers were received as follows: District of Columbia, Indiana, Minnesota, Montana, Nebraska, North Dakota, New Jersey, Texas, Vermont, and Missouri. Total, 10.

Negative replies were received from Alabama, Connecticut, Iowa, Kansas, Maine, New Hampshire, New Mexico, North Carolina, and Oklahoma. Total, 9.

In reply to the question, "Is reciprocity in licensing teachers to be desired between states?" affirmative replies were received as follows: Colorado, Georgia, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, Oklahoma, South Dakota, Vermont, Virginia, and Wisconsin. Total, 18.

Negative replies were received as follows: Arkansas, Arizona, California, Connecticut, Florida, and North Carolina. Total, 6.

A few superintendents submitted replies expressing doubt as to the desirability of reciprocity. Their replies are as follows:

ALABAMA: "Unless there could be fixed some uniform standard of qualifications, I think not."

KANSAS: "Yes, if a fair basis can be secured. It will be difficult to enforce reciprocity, because the requirements are so different in the different states."

MAINE: "Perhaps, under certain limitations."

NEVADA: "The standards required in the different states and the difference in grading papers vary so much that I do not know as reciprocity in licensing teachers would be advisable."

NORTH DAKOTA: "I question the wisdom of reciprocity in licensing teachers, as between states, below that of graduates of colleges and normal schools."

NEW YORK: "Not by an inflexible rule. Authorities should make thoro investigations in each case. The spirit of the teacher and the experience period are often of more importance than the kind of diploma held."

TEXAS: "If it caused a leveling up, 'yes;' but doubt advisability as a practical question."

Among the reasons given as against reciprocity in licensing teachers are the following:

ARIZONA: "The greatest 'educational' frauds we have in Arizona are the highly certificated teachers from the states. They are probably failures at home, and obtain licenses here under our laws by reason of their holding diplomas, etc., issued under some form of state authority. All ought to be examined; and if after a year's trial are failures, the licenses should be canceled."

CALIFORNIA: "Not under the present loose way of granting certificates in many of the states."

FLORIDA: "Not until some standard can be adopted among the states which will give a uniform value to certificates. Teachers should not be afraid of an examination at any time, and the few migratory teachers are not sufficiently important to let down the bars of the profession to them."

NORTH CAROLINA: "Do not favor it for the reason it may give opportunity to immoral or otherwise objectionable persons who may have gotten a license in one state to impose on the authorities in other states. A teacher conscious of his ability does not object to being examined in another state."

The following extracts from the laws of some of the different states, together with rules adopted by the state boards of education, are given for information and comparison:

DISTRICT OF COLUMBIA: In the District of Columbia no person shall be appointed teacher who is less than twenty years of age, and who is not a graduate of a Washington city normal school or other approved normal school. "Graduates of other approved normal schools shall stand upon an equal footing with certificate holders, and may be nominated, instead of the highest certificate holders, at the discretion of the board of education."

INDIANA: State board of education having power to grant state certificates has adopted the following rule: "All graduates of higher institutions of learning in Indiana, or other institutions of equal rank in other states, approved by this board, which require graduation from commissioned high schools, or the equivalent of the same, as a condition of entrance, which maintain standard courses of study of at least four years, and whose work, as to scope and quality, is approved by the state board of education, shall, on complying with the conditions enumerated below, be entitled to life state licenses to teach in Indiana: provided, however, that graduation by the applicant shall have been accomplished by not less than three years' resident study, and thoro, extended examinations in all subjects pursued privately and for which credit has been given by the institution."

MICHIGAN: "The state board of education is authorized to recognize and indorse state certificates upon similar examinations to those upon which state certificates in

Michigan are granted and which are valid for life; also, certificates granted from normal schools in other states having an equal course and leading to the same class of certificate as those granted by the normal schools of Michigan. No other classes of certificates granted in other states can be recognized. Formal application must be made under affidavit accompanied with proper testimonials and the certificate of the person."

Hon. Delos Fall, superintendent of public instruction, says: "It is my opinion that certificates granted in any state by the same authority and upon the same preparation as is required in Michigan should be recognized here, and *vice versa*. This matter would need to be guarded with great care, and there should be a distinct understanding between the state authorities of the several states as to what certificates could and what could not be recognized. This, it seems to me, is fair to both patrons and teachers of our public schools." The statute says: "That the state board of education may, in its discretion, indorse state teachers' certificates or normal-school diplomas granted in other states, if it be shown to the satisfaction of such board that the examination required or courses of study pursued are fully equal to the requirements of this state."

MINNESOTA: "No person shall be counted a qualified teacher, within the meaning of the school law, who has not a certificate in force, from a county superintendent, at the time of making a contract for services as a teacher, or a certificate or diploma from a state normal school of Minnesota, a certificate from the state superintendent of public instruction, or a diploma from a state normal school of another state, approved by the state superintendent of this state."

Graduates from state normal schools outside of Minnesota of equal rank with the normal schools of this state may have their diplomas indorsed for a limited time as certificates to teach in any public schools in Minnesota below the rank of high schools, upon application to the superintendent of public instruction.

MONTANA: State or life diplomas may be granted to any graduate of the state normal school of Montana, or the state university of Montana, or to graduates of other educational institutions within or without the state, upon conditions established by the state board of education.

Rule 2 of the board provides: "That an applicant for a state or life diploma basing his application on a state or territorial certificate or diploma from any other state or territory shall file with the state board of education an affidavit enumerating the branches in which he has been examined in obtaining the certificate or diploma upon which his application is based, unless these branches are enumerated in said certificate or diploma, and, where possible, give percentages obtained in the different branches; and that any applicant basing his application upon a diploma from any state normal school, or who is a graduate from the classical, scientific, philosophical, or literary courses of any university, college, or institution of learning whose requirements for entrance and graduation are equal to those of the University of Montana, which is legally authorized to issue diplomas, shall file with the board an affidavit specifying the branches embraced in the course of study pursued by said applicant in said school, with a statement of the length of time occupied in the completion of the said course of study, together with the standings as above; provided, that all applicants for state diplomas must file satisfactory evidence of having taught successfully thirty-five months, at least twenty-one of which must have been in the public schools of the state of Montana; provided, further, that all applicants for life diplomas must file satisfactory evidence of having taught successfully seventy months, at least twenty-one of which must have been in the public schools of this state."

NEBRASKA: "When any college, university, or normal school shall have a course of study equal in extent and similar in subjects to the elementary course of the state normal school, and shall have full and ample equipment and a faculty of instructors fully competent to give satisfactory instruction in the branches contained in said course, any graduate from such course shall be granted by the state superintendent a state certificate of the same tenor and effect as the certificate to teach issued to the graduates from the elementary course of the state normal school."

A diploma from a state normal school in another state, when approved by the state superintendent of Nebraska, secures to its holder the same rights and privileges in Nebraska as are guaranteed under it in the state in which it was issued.

NEVADA: "Upon presentation to them [state board of education] of a life certificate of any state or of the diploma of any state normal school, the board may grant a state certificate of equivalent grade without examination, valid for three years or less; provided that since the issuing of such certificate or diploma the applicant has been continuously or successfully engaged in teaching."

NEW JERSEY: In New Jersey the rules for examination for teachers' certificates prescribed by the state board of education provide: "The state board of examiners may indorse the diploma of any normal school or teachers' college, or a permanent certificate to teach in another state and valid as a certificate therein, when the course of study of such normal school or teachers' college or the requirements of such certificate shall be, in the judgment of said board, equivalent to those required for a state certificate to teach in this state; provided, that such other state shall grant reciprocal privileges to those holding diplomas or certificates from this state. When so indorsed, such diplomas or certificates shall have the same force and effect as if issued in this state. Normal diplomas and permanent certificates issued in states not having a state system of certification, and which are, therefore, unable to grant said reciprocal privileges, may be indorsed by the state board of examiners as is herein above provided."

NORTH DAKOTA: The superintendent of public instruction "may issue a state certificate, to be valid for a term of five years, unless sooner revoked, to be known as a normal certificate. Such certificate shall be issued only to those persons, of good moral character, who have completed the prescribed course of study in one of the normal schools of the state, or in a normal school elsewhere having an established reputation for thoroness, but the superintendent of public instruction may examine any such applicant in his discretion."

TEXAS: Teachers holding a diploma from the Peabody Normal School at Nashville, Tenn., "may teach in the public schools of the state during good behavior, and such diplomas shall rank as permanent state certificates; and such teachers shall not be subject to examination by any board of examiners." Graduates from any college or university of the first class, with a degree of bachelor of arts, bachelor of science, bachelor of letters, or any higher academic degree, who have taught not less than three years in Texas, may receive from the state superintendent of public instruction a permanent certificate.

VIRGINIA: Graduates of colleges and universities outside of the state who have taught successfully for three years in the schools of Virginia on first-grade certificates may be certificated to teach without further examination.

WISCONSIN: "Section 458*c* of the school code of 1901 provides that upon the recommendation of the board of examiners, the state superintendent may issue the unlimited state certificate to the holders of the diplomas of state normal schools, outside of Wisconsin, whose courses of study are fully and fairly equivalent to the courses of study in the Wisconsin normal schools, and the diplomas of colleges and universities other than the University of Wisconsin, whose courses of study are fully and fairly equivalent to corresponding courses in the University of Wisconsin. Graduates of colleges and universities must present to the state superintendent of public instruction, with their diplomas, satisfactory evidence of having given psychology and pedagogy at least as much study as is required in this state of candidates for a life certificate."

ARIZONA: Territorial certificates will be granted to holders of life diplomas and state normal school diplomas issued in any one of the United States, without examination, when such diplomas authorize the holder to teach in the public schools of the state in which they were granted, but not otherwise.

NEW YORK: "He [superintendent of public instruction] may also, in his discretion, indorse a diploma issued by a state superintendent or a state board of education in any other state, which indorsement shall confer upon the holder thereof the same privileges conferred by law upon the holders of diplomas or certificates issued by state normal schools or by the state superintendent in this state."

OREGON: "The state board of education may, at its discretion, grant without examination state certificates and state diplomas to persons presenting authenticated papers from other states of grade and kind like those granted by the state board of education; provided, that the state board of education is satisfied that said papers were secured by passing an examination equivalent to that given by the state board of education of this state for state papers; provided, that the state board of education may, at its discretion, grant a permit for one year to persons who hold papers of the grade and kind equivalent to the state certificate, but have not had the requisite amount of teaching experience in Oregon to secure a state certificate."

RHODE ISLAND: The state superintendent writes: "No definite rules have yet been formulated in regard to exchange of certificates, but the policy of reciprocity is adopted. With the limited number of applications from without the state it has so far been deemed better to judge each case on its merits. The board always accepts a certificate from another state or other normal schools upon as just and correct a basis as can be determined. We believe in extending to other states and all reputable institutions the fullest courtesy compatible with the maintenance of our standards."

AS TO COUNTY RECIPROCITY

In response to the question, "Are county superintendents or school commissioners in your state authorized to enter into reciprocal relations with each other?" affirmative replies were received from California, Colorado, Florida, Georgia, Minnesota, Missouri, Montana, Nebraska, New Jersey, North Dakota, Ohio, Vermont, and Virginia. Negative replies were received from Arkansas, Illinois, Indiana, Iowa, Kansas, North Carolina, New Mexico, New Hampshire, and South Dakota.

As to the desirability of having reciprocity in licensing teachers between counties, superintendents in the following states were favorable to the plan: Alabama, California, Colorado, Illinois, Iowa, Kansas, Minnesota, Montana, Missouri, Nebraska, New Jersey, North Dakota, Oklahoma, Vermont, Virginia, and Wisconsin. Superintendents from Arkansas, Arizona, Indiana, and North Carolina do not consider it desirable.

The following are a few of the opinions expressed in reference to the matter:

ALABAMA: "All certificates in Alabama are issued upon examination, and are valid in any county in the state. In the case of county examinations, I should think the question of reciprocity would depend upon uniformity in the county examinations."

"It is desirable, if a uniform standard of qualifications can be arranged."

ARIZONA: "No, unless the state is a very small one, and teachers and school officers are in touch with one another. County certificates have been discontinued by legislative enactment. All certificates now issued are territorial [state] certificates."

ARKANSAS: "I do not consider it desirable. It seems to me, however, that if county superintendents were required to file the examination papers of the applicant, and to keep them on file for one year, then, when a teacher desires a license to teach in another county, his papers might be forwarded from the county in which his examination was held to the county in which he wishes license to teach, in order that the examiner of the latter may grade the work for himself, and yet the applicant not be forced to a re-examination."

COLORADO: "Superintendents may recognize first-grade certificates issued in other counties by what is called a 'like-grade' certificate, good for the same length of time for which the original certificate was issued. In case of an emergency the law states that 'county certificates issued in this and other states may be recognized by indorsement good until the next regular examination. Such endorsement cannot be repeated or extended.'"

"Some form of county reciprocity seems necessary, but there should be uniform examinations thruout a state when such reciprocity is made legal."

FLORIDA: "All county certificates are issued upon questions uniform for the state. All except the third lowest grade may be transferred by mere indorsement of the county superintendent. While this is quite necessary it breaks badly into the standards, because the grading is much more rigid in some counties than in others."

"I favor a state grading committee, issuing certificates good thruout the state."

INDIANA: "No reciprocal relations between counties. Each teacher may send his manuscript to the department for examination. A license issued thereon is valid thruout the state."

IOWA: In Iowa the attorney general recently rendered an opinion in which he held: "It was clearly the intention of the legislature in framing the school law that every applicant for a certificate should appear in person before the county superintendent to whom application is made for a certificate and submit to an examination by him and in his presence. It is not, in my opinion, a compliance with the law to permit the applicant to write out an examination in the presence of the county superintendent of one county and forward the same to the county superintendent of another county for examination, with the request that a certificate be issued to the applicant if entitled thereto. There are many reasons which will readily suggest themselves why an applicant should appear in person before the county superintendent from whom a certificate to teach a public school is asked; and this was contemplated by the legislature in prescribing the examinations to which applicants are required to submit before receiving a certificate to teach."

MAINE: "We have no 'town system' in Maine, and each town has its school board, consisting of a committee of three and a superintendent who is ex-officio secretary of the board. All applicants must be examined by the town school board, except that a diploma from a Maine normal school or a state certificate signed by the superintendent of the schools of Maine may be accepted in lieu of examination."

MASSACHUSETTS: "We have a Massachusetts law that has never been executed for lack of office force and money. Consequently, Massachusetts has nothing of interest for you. We are pressing for a stronger law and an ample appropriation. We have superintendents now for all our towns and cities, who generally have the power to nominate teachers. They are toning up our quality; and our ten normal schools are trying to meet the demand from the superintendents. While perfecting these two agencies, we have been postponing action on our state examination plans."

NEVADA: "The standards required in the different states and the difference in grading papers vary so much that I do not know as reciprocity in licensing teachers would be advisable."

"In Nevada teachers' certificates can be made valid in all the counties of the state by applying to the state board of education and the sending of the examination papers to be examined by them."

"The same difficulty exists between the counties of the state that exists between different states. The county boards vary greatly in their gradings."

NEW HAMPSHIRE: "The town is the unit. We have no county superintendents. Each town is independent; no reciprocity."

VERMONT: "First- and second-grade certificates good thruout the state. Third-grade good by indorsement of county examiners."

TEXAS: "Certificate issued by any county may be valid in every county by a state board of examiners to whom the papers may be forwarded for re-grading."

"Provisions for forwarding to state board the papers of such applicants in county examinations as desire state certificates in lieu of the county certificates seems preferable to county reciprocity."

Of the laws that are reported to be satisfactory in their workings, only a few may be quoted:

MICHIGAN: Three grades of certificates are granted: first-grade, which, if indorsed by the superintendent of public instruction, is valid in the state for four years; second-grade, valid in the county where granted for three years; third-grade, valid in the county where granted for one year. The law now provides that third-grade certificates cannot be transferred from one county to another, but that the papers written for a second-grade certificate may be sent by the county commissioner of the county where the applicant has written to the examining board of another county, and if said papers are approved by said board of examiners they may issue a duplicate second-grade certificate valid in their county. Second-grade certificates are not transferable in any other manner.

MINNESOTA: "The state teacher's first-grade certificate is valid to teach in any public school in the state below the rank of high school. The second-grade state teacher's certificate is likewise valid in the county for which it is issued, but may be made valid by indorsement of the county superintendent of any other county in the state."

"A complete first-grade certificate certifying to scholastic requirements by the state superintendent, and to professional requirements, skill in teaching, and moral character by the county superintendent in whose county the examination is held, shall be valid in any county of the state. A complete second-grade certificate for both scholastic and professional requirements, signed by the state superintendent and the county superintendent, as indicated above for a first-grade certificate, shall be valid in the county in which the examination is held, and may be made valid in any county by the indorsement of the county superintendent of said county."

WISCONSIN: "If any person holding a certificate desires to teach in any county or superintendent district other than the one for which his certificate was issued, the county superintendent of that county or district may request the county superintendent who issued the certificate to transfer to him the papers in his possession upon which the certificate was issued, whereupon it shall be the duty of the county superintendent so requested to transfer the papers, if any. If these papers and standings are found satisfactory by the county superintendent to whom they were transferred, he may issue a certificate upon them of the same grade as the original certificate and coterminous with it, or one of a lower grade to be in force a shorter time, and he shall preserve the papers on file in his office. If the papers are found unsatisfactory and the certificate is denied, he shall return the papers to the county superintendent from whom he received them."

MISSOURI: "Certificates issued in one county cannot be indorsed in another county, but one county may accept papers or grades made in regular examination in another county on which to issue a certificate."

This brief and somewhat hasty examination of this subject leads to the conclusion:

1. That reciprocity in licensing teachers between states is desirable, and that a united effort should be made to bring about uniformity of requirements and reciprocal relations. The American teacher should be so in fact as well as name. The crossing of the boundary line of any state should no longer be assumed to nullify the qualifications of the skilled teacher, the successful disciplinarian, the expert supervisor, or the scholastic fitness of men and women whose energies are devoted to the cause of education.

2. Under proper and wise regulations, teachers having obtained excellent certificates from any county superintendent or board of education should be permitted to teach in other counties in the same state, either by having manuscripts forwarded and again graded, or by the indorsement of the certificate by the county superintendent, county board of examiners, or superintendent of public instruction, or the state board of educational examiners.

NATIONAL COUNCIL OF EDUCATION

CONSTITUTION

PREAMBLE

The National Council of Education shall have for its object the consideration and discussion of educational questions of general interest and public importance, and the presentation, thru printed reports, of the substance of the discussions and the conclusions formulated. It shall be its object to reach and disseminate correct thinking on educational questions; and, for this purpose, it shall be the aim of the Council, in conducting its discussions, to define and state with accuracy the different views and theories on the subject under consideration, and, secondly, to discover and represent fairly the grounds and reasons for each theory or view, so far as to show, as completely as possible, the genesis of opinion on the subject. It shall be the duty of the Council, in pursuance of this object, to encourage from all its members the most careful statement of differences in opinion, together with the completest statement of grounds for the same. It shall further require the careful preservation and presentation of the individual differences of opinion, whenever grounds have been furnished for the same by members of the Council. It shall invite the freest discussion and embody the new suggestions developed by such discussions. Any member making such suggestion or objection may put in writing his view, and the grounds therefor, and furnish the same to the secretary for the records of the Council. It shall prepare, thru its president, an annual report to the National Educational Association, setting forth the questions considered by the Council during the previous year, and placing before the Association, in succinct form, the work accomplished. It shall embody in this report a survey of those educational topics which seem to call for any action on the part of the Association. The Council shall appoint, out of its own number, committees, representing the several departments of education, and thereby facilitate the exchange of opinion among its members on such special topics as demand the attention of the profession or of the public.

ARTICLE I—MEMBERSHIP

1. The National Council of Education shall consist of sixty members, selected from the membership of the National Educational Association. Any member of the Association identified with educational work is eligible to membership in the Council, and, after the first election, such membership shall continue for six years, except as hereinafter provided.

2. In the year 1885 the Board of Directors shall elect eight members—four members for six years, two for four years, and two for two years, and the Council shall elect eight members—five members for six years, two for four years, and one for two years; and annually thereafter the Board of Directors shall elect five members and the Council five members, each member, with the exception hereinafter provided for (section 5), to serve six years, or until his successor is elected.

3. The annual election of members of the Council shall be held in connection with the annual meetings of the Association. If the Board of Directors shall fail, for any reason, to fill its quota of members annually, the vacancy or vacancies shall be filled by the Council.

4. The term of service of the several members of the Council chosen at the first election shall be arranged by the Executive Committee of the Council.

5. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership, and the Council shall fill vacancies caused by absence from the Council as herein defined, as well as vacancies caused by death or resignation, for the unexpired term. All persons who have belonged to the Council shall, on the expiration of their membership, become honorary members, with the privilege of attending its regular sessions and participating in its discussions. No state shall be represented in the Council by more than eight members.

ARTICLE II—QUALIFICATION FOR MEMBERSHIP

All members of the Council shall be either life or active members of the National Educational Association.

ARTICLE III—MEETINGS

There shall be a regular annual meeting of the Council held at the same place as the meeting of the National Educational Association, and at least two days previous to this meeting. There may be special meetings of the Council, subject to the call of the Executive committee, but the attendance at these meetings shall be entirely voluntary. A majority of the Council shall constitute a quorum for the transaction of business at any meeting, whether regular or called; but any less number, exceeding eight members, may constitute a quorum for the transaction of business at the regular annual meeting, as defined in this article.

ARTICLE IV—THE WORK OF THE COUNCIL

The Council shall, from time to time, undertake to initiate, conduct, and guide the thoro investigation of important educational questions originating in the Council; also to conduct like investigations originating in the National Educational Association, or any of its departments, and requiring the expenditure of funds.

ARTICLE V—THE APPOINTMENT OF SPECIAL COMMITTEES AND EXPERTS

In the appointment of special committees, and in the selection of writers and speakers, it shall be the privilege of the Council to appoint such experts, whether members of the Council or not, as are deemed best qualified to conduct investigations.

ARTICLE VI—THE PROGRAM

It shall be the duty of the president of the Council to prepare, with the asssistance and approval of the Executive Committee, such a program for the annual meeting as shall realize as fully as practicable the purposes for which the Council was organized and exists.

ARTICLE VII—STANDING COMMITTEES

*1. There shall be four standing committees: an Executive Committee, a Committee on Membership, a Committee on Educational Progress, and a Committee on Investigations and Appropriations.

2. The Executive Committee shall be composed of the president of the Council and of three other members, whose terms of office shall be so arranged that one new member may be chosen each year, beginning with the year 1899.

3. It shall be the duty of the Executive Committee to provide an annual program by selecting, whenever feasible, subjects for investigation, and appointing committees to conduct such investigations. It shall be the duty of the Executive Committee to carry out the provisions contained in this constitution referring to volunteer and invited papers.

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*As amended at the Minneapolis Meeting, July 11, 1902 [see minutes].

It shall be the duty of the Executive Committee to provide a place on the program for the report on any investigation which may by ordered by the National Educational Association or its departments.

4. The Committee on Membership shall be composed of the president of the Council and six other members, whose terms of office shall be so arranged that two vacancies may by filled every year, beginning with 1899.

5. There shall be appointed annually a committee of one to submit, at the next meeting, a report on "Educational Progress During the Past Year," in which a survey of the important movements and events in education during the preceding year is given. This committee need not be selected from the members of the Council.

†6. The Committee on Investigations and Appropriations shall be composed of nine members whose terms of office shall be so arranged that three vacancies may be filled each year, beginning with 1903. No proposal to appoint a committee to undertake an educational investigation of any kind, and no proposal to ask the Board of Directors of the Association for an appropriation for any purpose, shall be acted upon until such proposal has been referred to this Committee on Investigations and Appropriations for report.

ARTICLE VIII—THE DUTIES OF THE COUNCIL

1. It shall be the duty of the Council to further the objects of the National Educational Association, and to use its best efforts to promote the cause of education in general.

2. The meetings of the Council shall be, for the most part, of a "round table" character.

ARTICLE IX—AMENDMENTS

This constitution may be altered or amended at a regular meeting of the Council, by a two-thirds vote of the members present, and any provision may be waived at any regular meeting by unanimous consent.

By-laws not in violation of this constitution may be adopted by a two-thirds vote of the Council.

OFFICERS, STANDING COMMITTEES, MEMBERS

OFFICERS FOR 1901–1902

J. H. PHILLIPS	Birmingham, Ala.	*President*
MISS MARY E. NICHOLSON	Indianapolis, Ind.	*Vice-President*
J. F. MILLSPAUGH	Winona, Minn.	*Secretary*

EXECUTIVE COMMITTEE

The President, *ex officio*

Nicholas Murray Butler, New York, N. Y.	Term expires in 1902
Joseph Swain, Bloomington, Ind.	Term expires in 1903
Richard G. Boone, Cincinnati, O.	Term expires in 1904

OFFICERS FOR 1902–1903

WILLIAM R. HARPER	Chicago, Ill.	*President*
W. H. BARTHOLOMEW	Louisville, Ky.	*Vice-President*
J. F. MILLSPAUGH	Winona, Minn.	*Secretary*

EXECUTIVE COMMITTEE

The President, *ex officio*

Joseph Swain, Bloomington, Ind.	Term expires in 1903
Richard G. Boone, Cincinnati, O.	Term expires in 1904
Nicholas Murray Butler, New York, N. Y.	Term expires in 1905

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†Sec. 6 was added by amendment at the Minneapolis meeting, July 11, 1902 [see minutes].

OFFICERS FOR 1902-1903—*continued*

COMMITTEE ON MEMBERSHIP

W. T. Harris, Washington, D. C.	Term expires in 1903
Emerson E. White, Columbus, O.	Term expires in 1903
Augustus S. Downing, New York, N. Y.	Term expires in 1904
Lorenzo D. Harvey, Madison, Wis.	Term expires in 1904
James M. Greenwood, Kansas City, Mo.	Term expires in 1905
James H. Van Sickle, Baltimore, Md.	Term expires in 1905

COMMITTEE ON INVESTIGATIONS AND APPROPRIATIONS

James M. Greenwood, *Chairman*, Kansas City, Mo.	Term expires in 1903
Frank A. Fitzpatrick, Boston, Mass.	Term expires in 1903
Vacancy by reason of non-election	Term expires in 1903
Edwin A. Alderman, New Orleans, La.	Term expires in 1904
Augustus S. Downing, New York, N. Y.	Term expires in 1904
Lorenzo D. Harvey, Madison, Wis.	Term expires in 1904
Nicholas Murray Butler, New York, N. Y.	Term expires in 1905
Newton C. Dougherty, Peoria, Ill.	Term expires in 1905
Vacancy by reason of non-election	Term expires in 1905

MEMBERS

NOTE: The letter "A" following a name denotes that the member is of the class elected by the Association; the letter "C," by the Council.

	Term expires
*W. T. Harris, Washington, D. C.	A 1903
*C. B. Gilbert, Rochester, N. Y.	A 1903
*William R. Harper, Chicago, Ill.	A 1903
George J. Ramsey, Richmond, Va.	A 1903
*Charles R. Skinner, Albany, N. Y.	A 1903
Alexander Graham Bell, Wash., D. C.	C 1903
L. H. Jones, Ypsilanti, Mich.	C 1903
Elmer E. Brown, Berkeley, Cal.	C 1903
*W. H. Black, Marshall, Mo	C 1903
*Nicholas Murray Butler, New York, N. Y.	C 1903
Richard G. Boone, Cincinnati, O	A 1904
F. Louis Soldan, St. Louis, Mo.	A 1904
Lorenzo D. Harvey, Madison, Wis.	A 1904
*L. H. Halsey, Oshkosh, Wis.	A 1904
*Carroll G. Pearse, Omaha, Neb.	A 1904
Anna Tolman Smith, Washington, D. C.	C 1904
Mrs. Josephine Heermans, Kans. City, Mo.	C 1904
*James H. Van Sickle, Baltimore, Md.	C 1904
*John Dewey, Chicago, Ill	C 1904
*Newton C. Dougherty, Peoria, Ill.	C 1904
*W. H. Bartholomew, Louisville, Ky	A 1905
*Frank A. Fitzpatrick, Boston, Mass.	A 1905
*I. C. McNeill, West Superior, Wis.	A 1905
*E. Oram Lyte, Millersville, Pa	A 1905
*J. M. Greenwood, Kansas City, Mo.	A 1905
Reuben S. Bingham, Tacoma, Wash.	C 1905
*Joseph Swain, Bloomington, Ind.	C 1905
*Nathan C. Schaeffer, Harrisburg, Pa.	C 1905
*Louis C. Greenlee, Denver, Colo.	C 1905
*Z. X. Snyder, Greeley, Colo.	C 1905
*James A. Foshay, Los Angeles, Cal.	A 1906
J. H. Phillips, Birmingham, Ala.	A 1906
*Emerson E. White, Columbus, O	A 1906
James H. Baker, Boulder, Colo.	A 1906
Robert E. Denfeld, Duluth, Minn.	A 1906
Lucia Stickney, Cleveland, O.	C 1906
*Irwin Shepard, Winona, Minn.	C 1906
*Aaron Gove, Denver, Colo	C 1906
*J. W. Carr, Anderson, Ind.	C 1906
Frank A. Hill, Boston, Mass	C 1906
James M. Green, Trenton, N. J.	A 1907
*Augustus S. Downing, New York, N. Y.	A 1907
A. R. Taylor, Decatur, Ill.	A 1907
*Charles D. McIver, Greensboro, N. C.	A 1907
R. B. Fulton, University, Miss	A 1907
J. L. Spaulding, Peoria, Ill.	C 1907
*Bettie A. Dutton, Cleveland, O.	C 1907
*Charles H. Keyes, Hartford, Conn.	C 1907
*Edward R. Shaw, New York, N. Y	C 1907
*William F. King, Mt. Vernon, Ia.	C 1907
Charles F. Thwing, Cleveland, O.	A 1908
*Albert G. Lane, Chicago, Ill.	A 1908
*Edwin A. Alderman, New Orleans, La.	A 1908
*Charles M. Jordan, Minneapolis, Minn.	A 1908
*J. F. Millspaugh, Winona, Minn.	A 1908
*W. M. Davidson, Topeka, Kan.	C 1908
E. W. Coy, Cincinnati, O.	C 1908
*O. T. Corson, Columbus, O.	C 1908
James E. Russell, New York, N. Y.	C 1908
*Oliver S. Westcott, Chicago, Ill.	C 1908

*Present at the Council sessions at Minneapolis, 1902.

HONORARY MEMBERS

Earl Barnes, Philadelphia, Pa.
William N. Barringer, Newark, N. J.
Newton Bateman, Galesburg, Ill.
D. Bemis, Spokane, Wash.
Thomas W. Bicknell, Providence. R. I.
Albert G. Boyden, Bridgewater, Mass.
Anna C. Brackett, New York, N. Y.
John E. Bradley, Randolph, Mass.
Edward Brooks, Philadelphia, Pa.
George P. Brown, Bloomington, Ill.
William L. Bryan, Bloomington, Ind.
John T. Buchanan, New York, N. Y.
Matthew H. Buckham, Burlington, Vt.
David N. Camp, New Britain, Conn.
James H. Canfield, New York, N. Y.
Clara Conway, Memphis, Tenn.
John W. Cook, De Kalb, Ill.
Oscar H. Cooper, Abilene, Tex.
William J. Corthell, Gorham, Me.
J. L. M. Curry, Washington, D. C.
Charles DeGarmo, Ithaca, N. Y.
V. C. Dibble, Charleston, S. C.
John W. Dickinson, Newtonville, Mass.
Andrew S. Draper, Champaign, Ill.
John Eaton, Washington, D. C.
Charles W. Eliot, Cambridge, Mass.
William W. Folwell, Minneapolis, Minn.
W. R. Garrett, Nashville, Tenn.
Daniel C. Gilman, Washington, D. C.
James C. Greenough, Westfield, Mass.
W. N. Hailmann, Dayton, O.
G. Stanley Hall, Worcester, Mass.
Paul H. Hanus, Cambridge, Mass.
Walter L. Hervey, New York, N. Y.
Edwin C. Hewett, Normal, Ill.
J. George Hodgins, Toronto, Canada.
Ira G. Hoitt, Sacramento, Cal.
James H. Hoose, Pasadena, Cal.
George W. Howison, San Francisco, Cal.
James L. Hughes, Toronto, Canada.
Thomas Hunter, New York, N. Y.
Ellen Hyde, Farmington, Mass.
Edmund J. James, Evanston, Ill.
E. S. Joynes, Columbia, S. C.
David L. Kiehle, Minneapolis, Minn.
Thomas Kirkland, Toronto, Canada.
Henry M. Leipziger, New York, N. Y.
James MacAlister, Philadelphia, Pa.
Albert P. Marble, New York, N. Y.
Francis A. March, Easton, Pa.
Lillie J. Martin, San Francisco, Cal.
William H. Maxwell, New York, N. Y.
Charles A. McMurry, De Kalb, Ill.
Lemuel Moss, Minneapolis, Minn.
William A. Mowry, Hyde Park, Mass.
Mary E. Nicholson, Indianapolis, Ind.
John M. Ordway, New Orleans, La.
Warren D. Parker, Madison, Wis.
W. H. Payne, Ann Arbor, Mich.
Selim H. Peabody, Chicago, Ill.
John B. Peaslee, Cincinnati, O.
William F. Phelps, Duluth, Minn.
Josiah L. Pickard, Brunswick, Me.
Edward T. Pierce, Los Angeles, Cal.
William B. Powell, New York, N. Y.
J. R. Preston, Jackson, Miss.
John T. Prince, Boston, Mass.
Frank Rigler, Portland, Ore.
William H. Ruffner, Lexington, Va.
Ellen C. Sabin, Milwaukee, Wis.
Henry Sabin, Des Moines, Ia.
J. G. Schurman, Ithaca, N. Y.
H. H. Seerley, Cedar Falls, Ia.
H. E. Shepard, Baltimore, Md.
Edgar A. Singer, Philadelphia, Pa.
Euler B. Smith, Athens, Ga.
Homer B. Sprague, East Orange, N. J.
J. W. Stearns, Madison, Wis.
Thomas B. Stockwell, Providence, R. I.
Grace Bibb Sudborough, Omaha, Neb.
John Swett, Martinez, Cal.
H. S. Tarbell, Providence, R. I.
W. R. Thigpen, Savannah, Ga.
H. S. Thompson, New York, N. Y.
L. S. Thompson, Jersey City, N. J.
Arnold Tompkins, Chicago, Ill.
Julia S. Tutwiler, Livingstone, Ala.
Delia L. Williams, Delaware, O.
J. Ormond Wilson, Washington, D. C.
Lightner Witmer, Philadelphia, Pa.
H. K. Wolfe, Lincoln, Neb.
C. M. Woodward, St. Louis, Mo.

DECEASED MEMBERS

Robert Allyn	1894
Israel W. Andrews	1888
Joseph Baldwin	1899
Henry Barnard	1900
Norman A. Calkins	1895
Aaron L. Chapin	1892
N. R. H. Dawson	1895
Larkin Dunton	1899
Samuel S. Greene	1883
John M. Gregory	1898
George T. Fairchild	1901
Daniel B. Hagar	1896
John Hancock	1891
William D. Henkle	1882
Elnathan E. Higbee	1889
Burke A. Hinsdale	1900
George Howland	1892
John S. Irwin	1901
Henry N. James	1901
H. S. Jones	1900
Merrick Lyon	1888
James McCosh	1894
Thomas J. Morgan	1902
M. A. Newell	1893
Birdsey G. Northrop	1898
Edward Olney	1886
Gustavus J. Orr	1888
Francis W. Parker	1902
S. S. Parr	1900
John D. Philbrick	1885
Matilda S. Cooper Poucher	1900
Zalmon Richards	1899
Andrew J. Rickoff	1899
Charles C. Rounds	1901
James A. Smart	1900
R. W. Stevenson	1893
Eli T. Tappan	1888
Charles O. Thompson	1885
James P. Wickersham	1891
S. G. Williams	1900

SECRETARY'S MINUTES

FIRST SESSION.—MONDAY, JULY 7, 9:30 A. M.

The Council met in the Unitarian Church, and, in the absence of President J. H. Phillips, was at the appointed hour called to order by Vice-President Mary E. Nicholson.

The meeting was opened with prayer by Rev. J. E. Bushnell, of the Westminster Presbyterian Church.

Following prayer, the subject of the session, "Revenues for School Purposes," was opened by State Superintendent N. C. Schaeffer, of Pennsylvania, with a paper on "Taxation as it Relates to School Maintenance," and continued by District Superintendent Albert G. Lane, of Chicago, with a paper on "Taxation and Teachers' Salaries."

Discussion of these papers was opened by J. M. Greenwood, of Kansas City, and continued by Aaron Gove, of Denver, N. C. Dougherty, of Peoria, and Nicholas Murray Butler, of New York.

SECOND SESSION.—MONDAY, JULY 7, 2:30 P. M.

The Council was called to order for the second session by the Vice-President at the appointed hour.

After a vocal solo, "A Song of Thanksgiving," by Mr. F. H. Forssell, the chair named as members of the Committee on Nominations:

W. T. Harris, Washington, D. C.
Edwin A. Alderman, of Louisiana.
E. Oram Lyte, of Pennsylvania.

Charles B. Gilbert, of Rochester, N. Y., presented a paper on "The Function of Knowledge in Education," and was followed by W. T. Harris, of Washington, who spoke on "The Difference Between Efficient Causes and Final Causes in Controling Human Freedom."

Discussion of these papers was introduced by John W. Cook, of Illinois, and continued by J. M. Greenwood, of Missouri.

THIRD SESSION.—MONDAY, JULY 7, 8 P. M.

The Council was called to order by Vice-President Mary E. Nicholson.

After a vocal solo, "The Two Grenadiers," by Mr. John Ravenscroft, William R. Harper, President of the University of Chicago, addressed the Council upon "The Educational Progress of the Year."

FOURTH SESSION.—TUESDAY, JULY 8, 9:30 A. M.

The Council was called to order at the appointed hour by Joseph Swain, of the Executive Committee.

A vocal selection entitled "Until Dawn" was given by the Arion Quartette, of Minneapolis, which responded to an encore.

After the singing, prayer was offered by Rev. H. M. Simmons, of the First Unitarian Church of Minneapolis.

The chair recognized J. W. Carr, of Indiana, who offered the following resolution, which was seconded by J. M. Greenwood:

> In view of the importance of taxation as it relates to public education, and in order that a more comprehensive report may be made on this subject than it is possible to obtain otherwise,
>
> *Resolved*, 1. That a Committee of Nine be appointed by this body whose duty it shall be to investigate the subject of taxation as it relates to public education, and to make a printed report to the National Council of Education not later than the year 1904, unless otherwise directed by this body.

2. That the membership of this committee shall be composed as follows: The Commissioner of Education of the United States, and at least one state superintendent, one superintendent of a large city, one superintendent of a small city or town, one representative of rural schools; the remainder of the committee to be persons chosen for their special fitness for such work without regard to the interests they may represent.

Mr. Greenwood moved that a Committee of Three be appointed by the chair to present Mr. Carr's resolution to the Board of Directors for consideration at its meeting on Friday.

In the absence, because of illness in his family, of D. E. McClure, of Michigan, who had prepared a paper on "The School as a Culture Center in the Light of the 'Hesperia Movement,'" Miss Nicholson explained to the Council the cause of Mr. McClure's absence and stated that, in obedience to the rule of the Association governing such cases, the paper could not be read. She then gave a brief statement of the thought of the paper, and was followed by Ossian H. Lang, of New York, in a discussion of the subject based upon Miss Nicholson's statement.

After this discussion, papers were presented by John Dewey, of Chicago, on "The Social Aspect of Education," and by Miss Anna Tolman Smith, of Washington, D. C., on "The Recent French Reaction against Rousseau's Doctrine and in Favor of Social Education."

Discussion of these papers was opened by C. B. Gilbert, and continued by J. M. Greenwood, W. H. Black, John W. Cook, and W. T. Harris.

The chair named the following Committee to present the request of the Council for an appropriation to defray the expenses of preparing the proposed report on taxation:

J. W. Carr, of Indiana. J. M. Greenwood, of Missouri.
Charles H. Keyes, of Connecticut.

MEMORIAL SESSION.—WEDNESDAY, JULY 9, 3 P. M.

After the Council was called to order by Vice-President Nicholson, and before opening the special program of the session, J. W. Carr called attention to a violation of the by-laws in the appointment of the committee to present the Council's request for an appropriation to the Board of Directors, instead of referring the matter to the Committee on Investigations and Appropriations.

After a motion to reconsider this action was made and carried, the subject was duly referred to the Committee on Investigations and Appropriations.

The memorial services appointed for the session were opened with a vocal solo, "The Holy City," by Master Eugene Pauley.

Memorial addresses were made by Henry Sabin, of Iowa, on Dr. Charles C. Rounds, and by Wilbur S. Jackman, of Chicago, on Colonel Francis Wayland Parker.

Following the addresses named, W. T. Harris, E. E. White, John W. Cook, Miss Bettie A. Dutton, and Miss Nicholson spoke feelingly of the character and services of the distinguished members whose loss the Council mourns.

At the close of the memorial services, J. M. Greenwood presented the Report of the Committee on Investigations and Appropriations as follows:

The Committee on Investigations and Appropriations submits the following in reference to the resolutions on "Taxation as it Relates to Public Education," introduced by J. W. Carr, and recommends that the Council request the Board of Directors of the National Educational Association to appropriate the sum of $1,000, or so much thereof as may be necessary, to defray the clerical and such other expenses as may be incurred in the preparation of the report, as contemplated in the resolution.

(Signed) J. M. GREENWOOD,
N. C. DOUGHERTY,
FRANK A. FITZPATRICK,
AUGUSTUS S. DOWNING.

Dr. Harris moved that Mr. Greenwood, chairman of the Committee on Investigations and Appropriations, present the report of that committee to the Board of Directors. Carried.

The Committee on Membership reported vacancies in the Council and nominated persons to fill such vacancies as follows:

W. M. Davidson, Topeka, Kan., to succeed himself.
E. W. Coy, Cincinnati, O., to succeed himself.
O. T. Corson, Columbus, O., to succeed himself.
James E. Russell, New York, to succeed himself.
Oliver S. Westcott, Chicago, Ill., to succeed himself.
All of the above for the full term of six years.

J. L. Spaulding, Peoria, Ill., to succeed George P. Brown, Bloomington, Ill., term to expire in 1907.

Anna Tolman Smith, Washington, D. C., to succeed the late Francis W. Parker, of Chicago, Ill., term to expire in 1904.

Alexander Graham Bell, Washington, D. C., to succeed the late Charles C. Rounds, New York, term to expire in 1903.

(Signed) E. E. White,
W. T. Harris,
J. M. Greenwood.

The Committee on Nominations, thru its chairman, Dr. W. T. Harris, reported as follows:

To fill vacancies in the Committee on Membership:

Augustus S. Downing, New York, to fill vacancy caused by non-election last year. Term expires 1904.

J. M. Greenwood, Kansas City, and J. H. Vau Sickle, Baltimore, Md., to succeed themselves. Terms expire 1905.

To serve as officers of the Council for 1902–1903:

President—William R. Harper, Chicago, Ill.
Vice-President—W. H. Bartholomew, Louisville, Ky.
Secretary—J. F. Millspaugh, Winona, Minn.
Executive Committee—To succeed himself, Nicholas Murray Butler, New York, term expires 1905.

It was moved and carried that Joseph Swain submit a tentative list of nine members to constitute the committee to investigate the question of taxation for school purposes and submit a report of its conclusions at some future meeting of the Council, as provided for in the resolutions on this subject already adopted.

Following are the names of persons appointed members of said committee of nine:

Nicholas Murray Butler, of New York.
Aaron Gove, of Colorado.
W. T. Harris, of Washington, D. C.
J. M. Greenwood, of Missouri.
J. W. Carr, of Indiana.
Newton C. Dougherty, of Illinois.
N. C. Schaeffer, of Pennsylvania.
W. H. Maxwell, of New York.
C. G. Pearse, of Nebraska.

BUSINESS SESSION.—FRIDAY, JULY 11, 3 P. M.

The meeting was called to order by the Vice-President, Miss Nicholson.

After roll call of members, the minutes of the various sessions of the Council held in connection with the forty-first annual convention of the National Educational Association were read and approved.

Nicholas Murray Butler explained his inability to serve as a member of the Committee on Taxation to which he had been appointed as chairman. He asked the Council to accept his resignation from the committee, to appoint J. M. Greenwood chairman in his place, and to increase the membership of the committee from nine to ten by the election of two additional members.

In accordance with Mr. Butler's request it was moved and carried that his resignation from the committee be accepted, that J. M. Greenwood be made chairman, and that Charles D. McIver, of North Carolina, and Frank A. Fitzpatrick, of Massachusetts, be added to the committee.

Moved and carried that the committee now be made permanent instead of tentative.

As finally constituted the Committee on Taxation for School Purposes is as follows:

J. M. Greenwood, of Missouri, *Chairman*.
Aaron Gove, of Colorado.
W. T. Harris, United States Commissioner of Education.
J. W. Carr, of Indiana.
N. C. Dougherty, of Illinois.
N. C. Schaeffer, of Pennsylvania.
W. H. Maxwell, of New York.
C. G. Pearse, of Nebraska.
Charles D. McIver, of North Carolina.
Frank A. Fitzpatrick, of Massachusetts.

In view of the serious illness of his wife, which has resulted in the absence from this meeting of J. H. Phillips, president of the Council, the secretary was, on motion, instructed to communicate to President Phillips the sympathy of the Council in his anxiety and grief, and to express its sense of loss on account of his detention and inability to direct the deliberations of the Council.

The following resolutions were proposed by Nicholas Murray Butler, of New York, and unanimously adopted:

Resolved, That the Constitution, Art. VII, Sec. 1, be amended so as to read as follows:

1. There shall be four standing committees: An Executive Committee, a Committee on Membership, a Committee on Educational Progress, and a Committee on Investigations and Appropriations.

Resolved, That the Constitution, Art. VII, be amended by adding a new section, to be numbered 6, and to read as follows:

6. The Committee on Investigations and Appropriations shall be composed of nine members, whose terms of office shall be so arranged that three vacancies may be filled each year, beginning with 1903. No proposal to appoint a committee to undertake an educational investigation of any kind, and no proposal to ask the Board of Directors for an appropriation for any purpose, shall be acted upon until such proposal has been referred to the Committee on Investigations and Appropriations for a report.

The motion was made by Dr. Butler that the Council instruct the present Committee on Investigations and Appropriations to divide themselves by lot into three classes, so that the term of office of the first class shall expire in 1903, that of the second in 1904, and that of the third in 1905. After brief discussion the motion was carried unanimously.

Roll call of the Council showed that thirty-nine members had been present at the sessions of the Council.

On motion of Dr. Lyte the thanks of the Council were tendered the Vice-President for her efficient services as presiding officer during the sessions of the twenty-first annual meeting.

The chair announced adjournment *sine die.*

J. F. MILLSPAUGH, *Secretary.*

PAPERS AND DISCUSSIONS

TAXATION FOR SCHOOL PURPOSES

NATHAN C. SCHAEFFER, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, HARRISBURG, PA.

In December, 1850, Herbert Spencer published a volume on *Social Statics*, containing a chapter on "National Education," in which he announced the doctrine that the taxation of one man's property for the purpose of educating another man's children is robbery, and that the state has no more right to administer education than it has to administer religion. He states the doctrine in syllogistic form. The following is his own language:

> Inasmuch as the taking away, by government, of more of a man's property than is needful for maintaining his rights is an infringement of his rights, and, therefore, a reversal of the government's function toward him; and inasmuch as the taking away of his property to educate his own or other people's children is not needful for the maintaining of his rights, the taking away of his property for such a purpose is wrong.

The philanthropist Samuel Morley reprinted the chapter for general distribution. When a second edition of the pamphlet was called for, Mr.

Spencer added some further arguments, which are appended to the original chapter in the edition of *Social Statics* revised by his own hand, and dated in the preface, London, January, 1892.

This fact shows how hard it is for a philosopher working in his cell to adapt himself to the events of history, when these run counter to his original conclusions. As a matter of curiosity and as a specimen of felicity of style his line of argument may be worthy of consideration in the lecture-room of the university, but it no longer receives attention from school men who must get things done and whose interests lie beyond the formulas of the printed page. The absurdities in which, according to Spencer, the alleged right to education at the hands of the state would entangle its advocates have been found to have an existence only in the imagination of the philosopher.

The theory of the state upon which Spencer founded his doctrine has been cast to the winds by the statesmen of England. He assumes that government has no functions beyond the police power of the state; that there is no cause for interference on the part of the state until the children's rights have been violated and that these rights are not violated by a neglect of their education. In contrast with this narrow and heartless theory a larger view of the functions of government has gradually forced itself upon the public mind. When the state took away from the father the power of life and death over the new-born child it was considered an infringement upon his rights. When the Arkwrights and the Peels were amassing fortunes by the employment of little children in mines and factories, giving rise to conditions that called forth Cobden's scathing book on *White Slavery in England*, the government enacted mining and factory laws designed to secure to the child not merely the right to live but also the right to grow, altho such legislation was branded as an interference with the natural rights of parents and employers. The statesmen of today regard the child's mental growth as of equal importance with his physical growth, and the several states are just beginning in earnest to enact and enforce legislation designed to secure to the child its right to know as well as to grow. The civilized world has accepted the dictum of Macaulay that "Whoever has the right to hang has the right to educate." The new theory of the state assumes that the government can justly impose taxes to secure to the child its right to know; that the state can levy taxes for the establishment and maintenance of schools and the enforcement of compulsory attendance, just as it can levy taxes to maintain almshouses, factory inspectors, and orphan asylums.

A powerful shock in the form of loss, or threatened loss, of military and commercial prestige was needed to awaken Prussia, Austria, France, and England to a sense of the importance of educating the children of the masses as distinguished from the classes. In this connection I may be permitted to quote somewhat at length from my own article in the Philadelphia *Record* of February 22, 1902:

No sooner had the issue of the wars of 1866 and 1870 shown the superiority of Prussia over Austria and France than statesmen began to inquire into the cause. They found in the school system of Prussia an essential element of her military greatness. Casting the arguments and objections of Spencer and others to the winds, the British Parliament set to work to banish illiteracy from England and to make ignorance impossible among the masses. When it became apparent that the educated labor of Germany was winning from Great Britain not merely a portion of the home market, but also some of the best markets in other lands, the movement in favor of popular education became irresistible. The proceeds of a special excise tax, amounting to three and a half millions in our currency, were set apart to disseminate scientific knowledge among the industrial classes. In a speech at Colchester, as reported in the *Times*, Lord Roseberry said: "Germany has long been — twenty, thirty, or forty years — ahead of us in technical education. I am afraid of Germany. Why am I afraid of the Germans? Because I admire and esteem them so much. They are an industrious nation; they are, above all, a systematic nation; they are a scientific nation; and whatever they take up, whether it be the arts of peace or the arts of war, they push them forward to the utmost possible perfection with that industry, that system, that science which is a part of their character. Are we gaining on the Germans? I believe, on the contrary, we are losing ground. The other day one of the greatest authorities on this subject went to Germany, being stirred up by what he had seen of alarm in the newspapers on the subject. He came back and told a friend of mine that he was absolutely appalled by the progress made in the last twenty years by the Germans in technical and commercial education, as compared with what was going on in England."

To the peasantry of Europe, America is a word synonymous with opportunity. In making secondary education free to the common people, we have gone a step beyond the Old World. In Germany, the sons of the peasantry cannnot afford to pay the extra tuition fees required of those who attend the high schools (*Gymnasien* and *Realschulen*). Only in rare instances does a bright boy of the peasant class find his way to the university. In England, the upper classes attend private schools. The clergyman who supervises the parish school would not think, it is said, of sending his children to the same school. They get advantages which are beyond the reach of the common people. In the United States, the high school is free to all. By free text-books Pennsylvania has gone far to make education beyond the common branches possible for the average youth in the average home. The sublimest sights are witnessed in humble homes where father and mother, and sometimes the older children, toil from early dawn till dewy eve in order that some talented member of the family may be enabled to take advantage of the high school maintained by municipal taxation.

The advent of the high school brought to view new phases of taxation for school purposes. Shall the common people be taxed in order that the sons of well-to-do people may have an opportunity to study Latin and Greek and geometry? It was not at first perceived that the high school taxed the rich man for the purpose of giving every boy and girl the opportunity which the rich can easily secure for their children. Again, we were gravely told that the fathers, in establishing the common-school system, did not contemplate instruction beyond the common branches; that a common-school education was all that was necessary for good citizenship, and as good citizenship is the chief concern of the state, the government should not be expected to provide education beyond the common branches. But the good sense of the teachers and patrons prevailed. It was perceived that the state exists for the sake of the individual, and not the individual for the sake of the state; that schools sustained by taxation should fit their pupils for life, and that as civilization advances more education is required for complete living than was required when the system was founded.

Governor Horatio Seymour of New York rendered the nation a great service by the stand he took in favor of secondary and higher education. His reply to an able address which charged that colleges and high schools supported by the state are fungi upon the common-school system was so masterful that it was circulated as Bulletin No. 26 by the regents of the University of the State of New York. The same bulletin contains an address by Superintendent Kennedy, which shows conclusively how the arguments against the high school are in essence the arguments by which Herbert Spencer sought to rule out the primary school. The day has almost passed when the utility of taxation for high-school purposes is seriously questioned. Never was it more clearly shown than in this controversy that "the aggregate wisdom of an enlightened people has a more sure foundation in eternal truth than the most ingeniously constructed philosophy of an individual."

From taxation in aid of high schools there is but one step to taxation for college and university purposes. The state needs well-educated physicians, lawyers, chemists, and engineers. If the welfare of the people demands governmental assistance in the establishment of institutions for the teaching of medicine, law, science, technology, the right of the federal and state governments to levy the necessary taxes should no more be questioned than the right to raise money for the Military Academy at West Point and the Naval Academy at Annapolis. The arguments that would rule out taxation for university purposes would also be valid against taxation for the maintenance of free schools, including the high school and the kindergarten. Granted that taxation for school purposes is right, the question arises: How shall the taxes be levied? Here is a point wherein we are all like George Washington, and yet far ahead of him. He never rode on a trolley car, never traveled in a Pullman, never sent a telegram, never spoke thru a telephone, never listened to a phonograph, never studied by electric light, and never paid a school tax. In these particulars we are far ahead of the father of our country. But in another respect we are just like him. The clerk of a county in which he held property made the following entry: "It appeareth that Geo. Washington doth not like to pay taxes." Is not the highest evidence of patriotism found in a willingness to pay a just share of tax for the support of the government and the education of the people?

It must be admitted that whilst we all believe in taxation for school purposes, we prefer to let the other fellow pay the taxes, especially if the other fellow happens to be some rich corporation in which we own no stock. One of the most practical things which the educators of the National Educational Association can do for the schools is to teach, by example as well as precept, the true doctrine of taxation for school purposes.

The land grants by which the federal government sought to make education possible in the newer states and territories no longer suffice for the educational needs of their growing populations. The boasted school fund of Kansas, for instance, is barely sufficient to keep up the fires in the school stoves. The amount per scholar of school age received from this fund is 78 cents. The great bulk of the revenue for the support of the Kansas schools comes from local taxation. Editor John MacDonald claims that the people of Kansas now tax themselves more heavily than any other people for the support of the common schools. No scheme or system of school maintenance should exclude the idea of local support, for this serves to keep the school near the people.

The older states got no land grants except for their agricultural colleges. The statesmanship of Senator Morrill and others has resulted in the establishment of colleges for the study of agriculture and the mechanic arts (without excluding instruction in the ancient languages), whose equipment far surpasses the most sanguine dreams of our forefathers previous to the Civil War. The federal government has wisely refrained from the erection of the necessary buildings, and has thrown this burden upon the states, requiring them to raise, by taxation, the funds for buildings and equipment, thus bringing these institutions nearer the people.

The best method for aiding the schools out of state funds is by a special levy, the proceeds of which cannot be used for other purposes. This lets the taxpayer know for what purpose he is giving his money, and stimulates his pride in the institutions which he helps to support.

Professor Ely reports that in talking with two men who were digging stumps he was told that the tax in support of the state university was the tax which they paid most cheerfully.

Invested funds depreciate in value as the rate of interest diminishes, and leave an institution poorer unless it holds real estate in cities like New York, where the volume of trade enhances year by year the value of property near the business centers. Hence, endowed institutions are always begging for money, because, while their needs are growing, the rate of interest is decreasing. On the other hand, the taxable property of a commonwealth is constantly increasing, and the college or university supported by millage taxes grows in wealth as it grows in attendance.

The University of Michigan, for instance, gets a levy of one-fourth of a mill, which now yields an annual revenue of $349,500. The income of the University of Missouri represents an endowment of from six to eight millions. Of this income $120,000 is derived from a collateral inheritance tax (up to one-tenth of a mill).

The figures for Iowa, which is an agricultural state, are not merely significant but redolent of hope for the future. At the recent session of the legislature a bill was passed granting the Normal School at Cedar Falls, for building purposes, a tax levy of one-tenth of a mill on all the property of the state for five years. This means about $60,000 a year. By similar bills the State University and the State Agricultural College are each to receive one-fifth of a mill tax levy for five years, which will mean for each of them about $120,000 per year. By like methods of taxation Ohio not only gives liberal support to the State University at Columbus, but also provided, at the last session of the legislature, for the establishment of a teachers' college on a liberal basis in connection with each of the state universities at Athens and Oxford. Other instances of like liberality could easily be given. The plan saves these schools from uncertainty with respect to their income, and enables the authorities to pursue a fixed policy.

The same method of taxation is in force in some states for the support of the public schools. New York state, for instance, levies about one mill for general school purposes thruout the state. By this plan New York city, before it became Greater New York, paid 48 per cent. of the money distributed by the state and received 16 per cent. in return. It was an instance of the richer portions of the state helping to support schools in the more sparsely settled sections. The schools of New York city have been well provided for by a similar levy. While I was at work on this paper Superintendent Maxwell wrote me that the four-mill tax on the valuation of the real and personal property in the city of New York (which is $3,787,970,873) amounts for the year 1902 to $15,151,883.49. This is expended for the payment of salaries of teachers, superintendents, supervisors, attendance officers, and fees of lecturers. The money for buildings, etc., known as the special school fund and representing the physical side of the system, is not raised by special tax, as in the case of the general school fund, but the items of appropriation contained within the special school fund are appropriated by the Board of Estimate and Apportionment, and it is within the discretion of this board to name such amounts as it sees fit. I have not been able to ascertain whether this works as well as the Pittsburg plan, by which each local board levies the tax for building purposes and tries to surpass every other ward whenever a new school building is to be erected.

The Pennsylvania system of taxing railroads and other corporations is of interest. The railroads pay a percentage of their earnings into the state treasury. Thence it is distributed among all the school districts, so that the township which has no railroad gets the benefit of this revenue for school purposes. Perhaps the railroads do not pay as much tax as in other states where their tracks can be taxed for local purposes, but this system of taxation helps to keep the schools in operation in communities where the people see but little money thruout the year. Butter sold at 12 cents per pound and eggs at 6 cents a dozen, fourteen being required for a dozen to cover breakage, are indicative of a serious condition in those backwoods communities, where every added dollar of taxation is a serious burden upon the taxpayer. The Pennsylvania plan relieves this condition somewhat, and is effective in aiding townships which have no railroads. I am told that a citizen owning land on both sides of the state line in a section without railroads pays less tax in Pennsylvania than in New York, while the schools have attained about the same grade of efficiency. I confess I envy the New York plan of giving each school $100 for maintenance, and the New Jersey plan of giving at least $250 to each school out of state funds.

Who shall specify how much tax is to be levied for school purposes? If this is not fixed at town meeting, as in New England, some other method must be devised.

Where school boards are elected by popular vote they can be clothed with the power to levy the taxes for school purposes. If the members of the board of education hold their place by appointment (as, for instance, by the courts in the city of Philadelphia), the right to tax should be vested in a body of men like councils, whose members are directly responsible to the people. In theory this looks right, but in practice it leads to friction and results in school accommodations that are inadequate, as well as in other abuses. The average councilman has objects dearer to his heart than the welfare of his neighbor's children.

To prevent excessive taxation a maximum or limit should be fixed. In Pennsylvania this maximum limit is thirteen mills on the dollar for maintenance and an equal amount for school purposes. This limit provides for ample revenue, except in cases where property is assessed at less than its market value.

How can we convince the taxpayer that money spent in the right education of the people is the best investment of public money ever made? At this point I have often prayed for the gift of Gladstone, who as chancellor of the exchequer could "talk shop like a tenth muse." It is said of him that he could apply all the resources of a glowing rhetoric to the most prosaic questions of profit and loss, that he could even make beer romantic and sugar serious. One sometimes needs the gift of a Gladstone to make monetary figures interesting, not only to the taxpayer, but also to the boy when he suddenly develops the ambition to leave school for the sake of earning a dollar. Without claiming the gift of a Gladstone I have used the following lines of approach to the hearts and minds of boys and of the taxpayers who must meet the bills for the education of the boys. I admit that there are men who cannot be reached by arguments, because they hold the almighty dollar so close to their eyes that they can see nothing else in God's universe. Fortunately these are in minority. The majority can be reached by arguments like the following:

1. A youth working on a Lancaster county farm, under the most favorable circumstances, cannot earn more than $150 a year. At five per cent., this represents an interest-bearing capital of $3,000. He takes a course at the normal school and fits himself to teach. He now earns $450 a year. His earning power is henceforth equal to an interest-bearing capital of $9,000. The $600 which he spent in getting his education is worth in added capital a sum equal to $6,000. He takes a college course and gets

a position with a salary of $1,200. He has now added $15,000 more to his capitalized valuation. The figures vary in different states, but the foregoing calculation indicates one way of showing the capitalized value of an education.

2. Superintendent W. H. Cole, of Huntingdon, W. Va., has a different way of estimating the value of an education in future earning power. He takes a day-laborer who earns $1.50 per day for three hundred days in the year during a period of forty years. The earnings of his life amount to $18,000. He takes $1,000 a year as a fair average for the annual earnings of an educated man. In forty years his earnings will amount to $40,000. The difference between $18,000 and $40,000, or $22,000, represents the value in future earning power of the time a boy spends at school. Superintendent Cole figures out that the value in future earning power of a day spent at school is $10. And yet parents keep boys out of school to earn from half a dollar to a dollar in the factory and on the farm. In handling these figures it should be pointed out that the poorest financial investment which can be made is money spent upon a boy who wastes his time at school.

3. Commissioner W. T. Harris collected statistics showing that in the commonwealth of Massachusetts, which gives every child an average schooling of seven years of two hundred days each, the average daily earnings of the people are 33 cents in excess of the earnings for the rest of the United States, which gives the child but four years (a little more) of schooling. For the entire state of Massachusetts this excess amounts to $250,000,000 annually. In the days when the present wage-earners were at school in Massachusetts, she spent about ten millions upon her schools. Now, if you can put $10,000,000 into brains and get a return of $250,000,000 in increased earnings — $25 for every dollar invested — who will dispute the proposition that money spent in the right education of the people is the best investment of public funds ever made?

4. Sir John Lubbock estimates that by making education universal England has (since 1870) increased the earning power of the industrial classes to such an extent as to save $40,000,000 annually upon her pauper list.

Victor Hugo says: "Open a school and you close a prison." This has been literally verified in England. Since 1870 three buildings formerly used as prisons have become empty and are now used for other purposes. Whilst the population has increased by one-third, the number of criminals has diminished by one-third. Sir John Lubbock says that in juvenile crime the decrease is even more satisfactory. "In 1856 the number of young persons committed for indictable offences was 14,000. In 1866 it had fallen to 10,000; in 1876 to 7,000; in 1881 to 6,000, and, according to the last figures I have been able to obtain, to 5,100." This statement is taken from *The Use of Life*, published in 1894. He further estimates that the expenditure on police and prisons has been diminished by at least £4,000,000, or about $20,000,000 in our currency.[1]

5. For those who can appreciate it, the strongest argument in favor of liberal taxation for school purposes is drawn from the higher life. "Even so wise and good a man as Dr. Johnson laid it down almost as a self-evident axiom that if everyone learnt to read, it would be impossible to find anyone who would do the manual work of the world." "Matthew Arnold tells us that there are still many who think that culture and sweetness and light are all moonshine. But this was written in 1869." Today the leaders of thought in the world's life recognize that the chief reason for maintaining the school is found in the fact that education fits our boys and girls to lead the higher life of thought and faith and hope and love.

I close by some words of caution taken from the article in the Philadelphia *Record* above referred to, adding in a footnote some statements which have come under my notice since that article was written:

> So long as our leaders believe that money spent in the right education of the people is the best investment of public money ever made, there will be revenue enough to give the rising generation all the education it will take, provided that no money is squandered in municipal misrule and extravagance. But at the rate at which some cities are compelled to borrow money their inhabitants are gravitating rapidly toward European conditions. In the vicinity of Naples the owners of some estates pay 40 per cent. of their income in taxes. One member of the Italian parliament recently declared that his taxes amount to 60 per cent. of the income from his estate. Before the French Revolution the peasants paid 80 per cent. of their earnings in taxes. Today taxation stares a Frenchman in the face at every turn of his life, from the time he opens his eyes in the cradle until his body is laid to rest in the grave. Under Turkish rule the people have been known to cut down the very fruit trees on their estate in order to escape the rapacity of the tax-gatherer. A recent account from Syria would indicate that the peasant farmer, by the time all his taxes are paid, may have 20 bushels out of the 100 which he had succeeded in raising by hitching his wife and his cow to the plow. In Russia the taxation sometimes drives the peasant to sell in the fall the grain which he knows he and his children will need in the spring.[2] In such circumstances there is a limit to the taxes which the people can pay for schools. Fortunately we have not reached a state of taxation as bad as in the countries

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[1] *The Use of Life*, pp. 98-101.

[2] In Egypt until quite recently the annual exactions from its peasantry — the fellahs — under the name of taxation produced an extremity of want which closely bordered on starvation.

In Italy, which in ancient times was regarded, as it is today, potentially the richest country in Europe, and although its present government cannot fairly be called despotic, its agriculture is burdened with state exactions that are reported as absorbing from one-third to one-half the value of its annual product — *Wells' Theory and Practice of Taxation*, p. 228.

In Russia the present governmental exaction — under the name of taxes — from the agricultural peasant — is understood to amount to about forty-five per cent. of his annual product or earnings.— *Ibid.*, p. 227.

Of the conquest and occupation of Egypt by the French, 1798-1801, the masses of the people have but little knowledge; but the name of General Kleber, to whom the government of the country was intrusted by Napoleon on his return to France, is still held in grateful remembrance, coupled with the highest title the Arabs could bestow upon him — namely, "the Just,"— because under his rule, as popular expression has it, "he levied taxes only once."— *Ibid.*, p. 135. The same remark is now applied to the English administration of Egypt. The famous Rosetta Stone tells how about 193 B. C., Ptolemy V. Epiphanes, King of Egypt, conferred great benefit on his people by remitting certain taxes and abolishing others. Taxation has played an important part in shaping the world's history, and is destined to become a burning question in the civil, municipal, and educational history of the United States.

just named. Relatively we pay more in direct and indirect taxation, according to population, than most of the countries in Europe, but our splendid resources have saved us from feeling any grinding effects. The lesson of the Old World should be before our eyes. Every citizen should see to it that the money raised by taxation is wisely expended, lest at some future day we may reach a limit beyond which there will not be enough revenue to give every child the best education it is willing to take.

SUMMARY

1. Taxation for school purposes is now the accepted policy of every civilized country.
2. The nature and purposes of taxation should be taught in connection with history and civil government.
3. One of the highest tests of patriotism is found in a willingness to pay a just share of tax for the support of the government and the education of the people.
4. The best method of state taxation for school purposes consists in setting apart a millage of tax which cannot be diverted to other purposes.
5. State taxation of railroads and other property to raise a fund for distribution among the school districts serves to aid the schools of townships which have no railroads or other valuable corporate property.
6. The directors or controllers who are responsible for the running of the schools should have power up to a fixed limit to specify the amount of tax to be raised for school and building purposes.
7. Arguments should be addressed to taxpayers, designed to show that money spent in the right education of the people is the best investment of public funds ever made.
8. Money raised for municipal and educational purposes should be expended honestly and wisely; otherwise a limit of taxation may be reached beyond which it will be impossible to raise money for the maintenance and improvement of our systems of public instruction.

TAXATION AND TEACHERS' SALARIES

A. G. LANE, DISTRICT SUPERINTENDENT OF SCHOOLS, CHICAGO, ILL.

The evolution of the system of public instruction during the last century has brought about radical changes in the requirements for teaching, and has rapidly developed the professional teacher. The natural result of increased efficiency in any department of labor is increased compensation.

The vast sum spent for the education of the youth of this country is an indication of the importance placed upon it by the people. A republic's strength is measured by the intelligence, prosperity, and ideals of its people. The ideal standard that "all men are endowed with certain inalienable rights" has been interpreted by the people to mean that an education is an essential need of every child, also a right, and that it is the foundation for citizenship. The rapid growth of population by natural increase, by the immigration of people from every part of the world, many of whom do not speak or read the English language, has emphasized the great need of universal education. Compulsory attendance of children at school is a logical means to attain this end.

In cities the problems of providing good streets, water, light, transportation, police and fire protection, parks, libraries, and schools have been carefully considered, and are being successfully worked out. The equity and justice of caring for the sick, the defective, and the helpless poor have been quite fully recognized.

Cities have made many demands, and the response of the people in voting taxation has been prompt and willing. The rapid development of the country, the productive harvests, the rich mines, the boundless resources of wealth, have made it comparatively easy in the past to pay taxes for all public improvements.

With increased wealth, the rates of interest on money have decreased; the percentage of profits on small lines of business has become less; concentration in capital has resulted. These changes have led to a scrutiny of taxes, to their evasion, to reduced valuations, to legal limitations, and in many instances to restricted public improvements and to impaired public service.

Any comparison of the growth, improvement, and cost of public service in the cities of this country will show that the older cities are gradually classifying their revenues and expenditures, concentrating the taxing power in one body to secure equity, making fair provision for the necessary departments of public service, and limiting the total tax levies to a rate per cent. in harmony with substantial, conservative business interests.

An examination of the report of the Commissioner of Labor, Bulletin 36, September, 1901, p. 925, gives statistics showing that the rate of school expenditures to the total expenditures was as follows:

New York city - -	15 per cent.	St. Louis - - -	17 per cent.
Chicago - - -	32	Boston - - - -	16
Philadelphia - - -	17	Minneapolis - - -	25

In comparing the items for Chicago with the other cities we find that the taxes levied in Chicago for special assessment and by the Drainage Commission are not included; hence the large per cent. credited to Chicago would be reduced.

The percentages in other cities are:

Cleveland - - -	21.5 per cent.	Pittsburg - - -	14 per cent.
Buffalo - - -	19	St. Paul - - -	19
San Francisco - -	21	Omaha - - - -	26
Cincinnati - -	15.5	Los Angeles - -	33

The higher rates in Chicago, Omaha, and Los Angeles are partly produced by the large amounts expended for buildings. The school revenues are therefore from 17 to 25 per cent. of the total tax. From the report of the United States Commissioner of Education for 1900 we find that the expenditures for teaching as compared with the total expended for schools is as follows :

New York city	53 per cent.	Minneapolis	65 per cent.
Chicago	68	Cleveland	60
Philadelphia	58	Buffalo	59
St. Louis	54	San Francisco	82
Boston	58	Cincinnati	82

The high percentages for San Francisco and Cincinnati are explained by the fact that only 2 per cent. of total expenditures was for buildings, and in Chicago, for the year 1900, only 10 per cent. of the expenditures was for buildings. On the other hand, in New York city the amount for buildings was 27 per cent. of the total expenditure, in Philadelphia it was 26 per cent., and in Minneapolis it was 20 per cent.

New York state spent $36,395,269 for schools for the year 1901, of which 59 per cent., or $21,504,619, was for teachers' salaries.

Illinois spent $18,167,219 for school purposes for the year 1900, of which 63 per cent., or $11,415,992, was for teachers' salaries.

About 60 per cent. of the total tax for school purposes then is expended for teachers' salaries. An examination of similar tables for other years, and for some other cities and states, shows some variations, which doubtless could easily be interpreted if all the facts were known.

An examination of the basis of assessment in the various cities and states shows a wide difference. Illinois assessments are 20 per cent. of the cash value of property; New York city 70 per cent., altho the law calls for full value; Philadelphia 80 per cent., which is the legal basis; Boston, 100 per cent.; Baltimore, 75 per cent.; Cleveland, 50 per cent.; Cincinnati, 60 per cent.; Buffalo, 70 per cent.; Syracuse, 100 per cent.; Minneapolis and St. Paul, 60 per cent. If the taxes in these cities were assessed upon the cash value of all property, then the rate would be about 2 per cent. for all ordinary taxes.

We found that the total school tax was from 17 to 25 per cent. of the total tax for all purposes. Assuming 20 per cent. to be an average, then the school tax is one-fifth of the total rate of 2 per cent. for all purposes, or 4 mills on the dollar. We also found that the amount of the school tax devoted to teachers' salaries was about 60 per cent. of the total school tax, or three-fifths of 4 mills, which is 2 2/5 mills.

It is probably safe to say that a tax of from 2 to 3 mills on *all* property at its *cash* value would produce sufficient revenue to pay teachers' salaries, and that a tax of 1 to 2 mills additional would provide for sites, buildings, and incidental expenses for maintenance.

The amended New York city charter authorizes a tax of 4 mills on all real and personal property, for the sole purpose of paying the salaries of officers and teachers. The law further fixes the minimum and maximum compensation of all teachers and the rate of increase. It also provides that any surplus in the salary or "General School Fund" shall be deducted from the next 4-mills tax levy. If assessments in New York city were made on cash valuations of real estate instead of 70 per cent. of it, the total assessed valuation of all property in New York city would be about $5,000,000,000. A tax of 2½ mills would more than pay the salaries of teachers.

The assessment of Chicago is supposed to be made on one-fifth of real values. If it were made on a 100 per cent. basis, the total valuation would be a little less than $1,400,000,000. Two and one-half mills on this amount would be $3,500,000. The amount paid for teachers' salaries for the year 1900 was $4,812,560, or 3½ mills on each $1 of valuation, which is higher than the 3 per cent. limit suggested.

The assessed valuations in Illinois, including Chicago, are notoriously unjust and inadequate, and much property is unassessed. There are other cities where the conditions are also unjust.

In considering this question of the education of all children for citizenship, the fact must not be overlooked that most of the states have in some degree assumed this responsibility by levying a state tax for the maintenance of schools. The principle upon which the state tax was originally extended was that the wealth of the whole state should contribute to the education of all the children, that a standard should be maintained, and the means should be provided to aid districts which are unable to sustain schools.

Illinois, prior to 1872, levied a tax of 2 mills on every dollar of assessed property, which then produced about one million dollars, and this was distributed to districts, one-half on the acres of territory and one-half on the number of days attendance of pupils. If this tax had remained unchanged the amount would have increased as the wealth of the state increased. Since that date, under a new law, only one million dollars has been raised annually, and distributed thruout the state on the number of children under twenty-one years of age. As the population has increased, the amount distributed per capita has grown less each year. The increase in population has been mostly in cities and towns, hence in the distribution of the state tax the amount paid to the rural districts has become very small. Local taxation has been constantly increased until under the statutory limitation of 2½ per cent. on assessed valuations, which are made at one-fifth of the cash value, it is impossible to maintain the schools more than five or six months in the rural districts and in some of the towns.

The accumulation of capital in the large cities, and the plan of distributing the tax on railroads to the districts thru which the roads pass, have left the wholly rural districts remote from railroads and with a sparse population without adequate means to sustain schools.

In many of the villages and towns there is an aggregation of working people who have but little personal or real property. The surrounding farming lands are not included in the school district, hence the villages are paying the full amount of tax authorized for school maintenance, while the farming district which is naturally tributary to the village and is made more valuable by its location is taxed only one-fourth to one-half as much.

The location of railroads representing large capital, the accumulation of wealth at certain places, the massing of working people in one district and the concentration of wealthy people in another district, cause great variations in the local tax levies and emphasize the importance of the distribution of a state tax on a basis which will help the poorer districts.

The inability of many districts in the state of Illinois to maintain schools, even when taxed 2½ per cent., has attracted public attention. State Superintendent Alfred Bayliss says that "There were 229 school districts in the state that found it difficult or impossible to maintain schools six months during the year ending June 30, 1901, with the limit of 2½ per cent. taxation."

His report for 1900, p. 303, shows that there were 29 out of 102 counties which maintained schools less than seven months. Nineteen counties show an average time of six and a half months and less. These conditions led the Illinois State Teachers' Association, at its last session, to appoint a committee to present these facts and figures to the people and to the legislature. The teachers of the state will ask the legislature to appropriate $5,000,000 annually, and distribute it on some basis which will provide for the instruction of *all* the children of the state, during an adequate number of days in each year.

The state of New York has taken progressive steps in the solution of these problems, and has levied a general annual school tax. In the year 1900 the rate was seventy-six hundredths of a mill, and the amount raised was $4,150,000. This was distributed to cities and counties. The fixed amount of $100 was appropriated to each school continuing in session 160 days or more. An additional amount was apportioned to each district according to the total days attendance of pupils. When two or more teachers were employed in graded or separate schools, $100 additional was appropriated for each teacher. This law thus aids each district in providing the means by which it can maintain school at least 160 days of every year. It also gives permanency to the teachers' work and provides better compensation. The state of Pennsylvania has also taken effective measures to aid all schools by raising and distributing $5,500,000 annually.

The necessity for making better educational provision for the instruction of children in the rural districts, by consolidation of school districts, the transportation of pupils, and increased money appropriations exists in many of the states. The reports of county and state superintendents show that if effective instruction is to be imparted to all children, more generous provision must be made for the ample compensation of teachers, for permanency in their work, and for centralized schools in the rural districts.

The schools have always been generously supported by the people, and the people may be trusted in the effort to fairly compensate its public officers.

The proposition that the fund for the payment of teachers' salaries be increased by the distribution of a larger amount of money to be raised by general state tax and to be distributed in such a way as to insure the maintenance of rural schools from 160 to 180 days each year, is commended.

Effective administration of a school system can be most easily secured when the teacher can work with the certainty of a compensation on a fixed scale, without radical and violent fluctuations, and when the general principles of civil service prevail, and teachers are retained during efficient service and good behavior. To secure these results in the larger cities, the statutes relating to the raising of taxes for the teachers' salary fund should provide for an adequate and definite rate of income.

DISCUSSION

Nicholas Murray Butler, of New York.—The two admirable papers in which this subject has been presented to the council deserve most careful study. The subject itself cannot be exhausted at one session. It should be kept before us for a series of meetings until we have examined and analyzed the fundamental principles which are involved.

It is necessary for us to occupy a double point of view. As teachers and school administrators we are naturally anxious that the commonwealth and the several localities shall support education as liberally as possible. As citizens, however, we are concerned in seeing that what has suggestively been called the "breaking point" in taxation be not reached, and also that no essential principle of our political system be violated in raising money for the support of public education.

The question is at bottom an economic and political one. Every educational aim which we have in view must stand or fall according to its economic basis and its economic support. It is clear to me that we cannot secure the sums needed for the proper support and development of public education save by recognizing the fundamental fact that our public education depends primarily upon the sovereignty of the state or commonwealth, and that the duty of the state or commonwealth to support it adequately is immediate and clear. It is for this reason that I believe we should labor to bring about a condition in which the commonwealth, exercising to the full its powers of indirect taxation, should release revenues derived from sources of direct taxation, leaving the latter entirely to the localities. From the indirect taxes so raised the commonwealth should appropriate for the localities the amounts needed to meet the teachers' salaries, at a minimum scale to be fixed by the legislature. Any locality wishing to pay salaries in advance of this scale would be at liberty to tax itself for that purpose. Inasmuch as the standard of entrance to the teaching profession is or should be fixed by the state, and inasmuch as the state has or should have direct control and supervision of normal schools and training classes, it is entirely appropriate that the sums needed for teachers' salaries should be raised by the state, preferably from indirect sources of taxation, and apportioned to the localities by the proper state authority.

There remains the cost of providing buildings and grounds, that of providing supplies and other necessary incidental expenses. The cost of all these should be met by the locality by direct taxation. In my judgment, however, a scientific system of bonding should be entered upon by which the cost of new sites and buildings is met by bond issues. If this system of bond issues be scientifically adjusted, a low rate of interest can be had and a sinking fund established, which will retire the bonds within a forty-year period. School sites and school buildings are, in my judgment, not a proper charge upon the revenues of a given year. They are permanent investments in tangible property. This property remains at the disposal of the locality and may be levied upon if necessary by the locality's creditors in case of failure to meet just obligations. It is only fitting that the cost of buying sites and erecting buildings should extend over at least a generation. In no other way can a large and rapidly growing community meet its obligations to its children without either unduly burdening its citizens with taxation, or preventing the development of other necessary municipal improvements. In smaller communities it may sometimes be better policy to charge the cost of site and building to current revenues, but where property is dear, and the building itself expensive, this cannot be wisely or justly done.

By such a division between the state and the locality as I have outlined, and by a development of the system of indirect taxation, upon which the states have only recently begun to enter, ample funds could be secured for school purposes. What we need, and need very badly in this country, is not only a more scientific system of taxation, but more adequate and exact information as to what should be the relative cost of various elements in the disbursements of our cities, towns, and villages. For example, no one knows just what ought to be the normal cost of the public-school system of a city of 250,000 people. We know how rapidly such a population increases, and how many children of school age come under the care of the community each year, but we do not know what the school system should normally cost, or what should be the proportion of its cost to the total cost of maintaining the local government. Nor do we know what proportion of a city-school system should be charged to teachers' salaries, what to supplies, what to supervision, and what to the other items which make up the total bill of expense. Here is a field of investigation which is of surpassing interest, not only to school officer and superintendent, but to every intelligent citizen. It cannot be entered upon too soon, for the subject is one which goes to the very bottom of our public life.

James M. Greenwood, of Kansas City, Mo.—The different methods in vogue in different states for obtaining revenue for school purposes make the question under discussion a complicated one. It is practically impossible to ascertain with exactness what the cost of education is in different sections of the country. The study of hundreds of school reports and a careful compilation of their statistics fail to give anything like a correct result. Only a few superintendents report what the schools actually cost, and those who attempt such reports differ so widely in their classifications of expenditures as to throw little light upon the question. Some report the cost of running expenses and omit that for permanent improvements. Others set forth the outlay tor teachers' salaries, fuel, and other major expenses, and omit entirely items which singly are not noticeable but which aggregate considerable amounts. Now averages and estimates thus obtained are valueless for comparison and, worse than that, they deceive those who have a right to know the truth. We must have fuller facts.

A few years ago a committee was appointed to devise a method of securing uniformity in estimation of school expenditures, but somehow little good has come from the effort. We must know and consider everything that enters into the cost, both temporary and permanent. It is usual to take into consideration only cost of tuition, of fuel, and of janitors, and then to base average cost upon these outlays. This is not enough. Some cities have a large bonded debt incurred for school purposes: we must know the necessary outlay for interest and include this with the other items of cost if our financial statistics are to serve any useful purpose.

Another thing: There is great danger of piling up expenses on the people until the burden becomes unbearable and reaction sets in. In this way great harm has been done by reckless boards and superintendents. It is the superintendent's duty to see that there is no extravagance in the administration of the schools and that the business be so conducted that no backward steps will be necessary. He must stand firm, and, when necessary, hold his board from going too far. When adversity comes it is fortunate for him if he can say truly, "I have done all that could be done to prevent this result." It cannot be too strongly urged that the financial rock is that on which the schools are based.

N. C. DOUGHERTY, of Peoria, Ill.—In Illinois, before the adoption of the constitution of 1872, there were two boards which made assessments — one for local purposes, the other for state purposes. These assessments differed in amount. It was surprising how much more the property of a city was worth when assessed for local purposes than when assessed for state purposes.

In one city in 1868 the value of the real estate and personal property returned by the local assessor was eighteen million dollars, and the value of the same property as determined by the other assessors was not quite five million dollars. The object was to pay as little as possible for the support of the state in matters which were not of local interest.

By the constitution of 1872 the assessment made for local purposes was also used for state and county purposes. At once the value of property everywhere decreased. Each locality was willing to pay for local purposes a high rate of taxation on the assessed valuation of the property, if by so doing the amount which it paid for state purposes was decreased. The object in all cases was to avoid taxation, and this desire was by no means confined to corporations.

Finally, the legislature required that all property, real and personal, should be assessed at its actual value, and one-fifth of this value be the assessed value on which taxes should be levied. On this assessed value a tax of 5 per cent. is allowed for school purposes, which is 1 per cent. of the actual value of the property. For a city this yields an abundance of revenue — as much as should be used for schools, important as they are.

We need, however, a greater state appropriation to help out our rural schools.

The tax on railroads and on all corporations licensed by the state should be divided among all the people of the state. Pennsylvania has shown us how to do this, and we shall soon follow in her footsteps.

One difficulty which the people of the western states have labored under is the custom of erecting expensive school buildings and issuing bonds for the payment of the same. The interest on these bonds and the accumulation of a sinking fund to meet them at maturity has taken too much of the school revenue. But a wiser method is now followed, and our buildings are now, in most cases, paid for when erected.

In my own city, our motto is to pay as we go; and on the 30th of June each year, the board of education does not owe one dollar. We issue no bonds and shall leave no legacies of debt to succeeding generations.

This may not be a good policy for older cities, but it is for the newer and smaller ones. The school administration which keeps out of debt, issues no bonds, but pays as it goes, will avoid many difficulties, and will receive the warm support of the people.

Aaron Gove, of Denver, Colo.— I regard the financial conduct of a school district to be so important that even the chief educational interests are limited or modified by a knowledge of the legal receipts. A superintendent of schools, while not in authority, has large control of the limitation of expenses. Many misfortunes in the western states in the career of schools must be traced directly to mismanagement on the financial side; sometimes, not always, however, the misfortune could have been averted by the interference of the superintendent. An intimate knowledge of this phase of the superintendent's duties is an essential part of his business. Not much experience is necessary for a superintendent to appreciate this fact, for frequently he follows an administration that has been lavishly expensive, not so much thru corruption as thru ignorance.

I therefore look upon this movement of the Council as of very great importance, and trust that measures will be taken for such a review of the field as shall give us such counsel as will enable the superintendents of small cities to be efficiently watchful against the unnecessary spending of money. The commercial world employs the brightest and best talent to sell goods. These men are proficient in their work; are able sometimes to sell goods possibly helpful, but often unnecessary to the school district. Then it is that the superintendent should be able to state to the managing board that while the goods about to be purchased are worthy, the condition of the treasury scarcely justifies the expenditure.

THE FUNCTION OF KNOWLEDGE IN EDUCATION [1]

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An American philosopher has said, "Even a proverb may be true." Probably a few are truths; more are half truths, many are individual facts which, stated as general truths, are fit only to mislead Sancho Panzas.

"Knowledge is power" is even less true, it is a mere trope; the conditioning for the thing conditioned. Knowledge is no more power than a steam engine is power.

And yet the acquisition of knowledge is necessarily the great fact, and the most manifest endeavor in organized education and whatever theories may be held, practically all the time in all schools is devoted to this acquisition.

We have countless definitions of education made by teachers and educational philosophers, and innumerable theories as to the purpose and end of the school. Yet none of them mention the acquisition of knowledge in this connection. We speak of the evolution of the individual, the calling out of his powers (false philology), all-around training, symmetrical development, but none of us would venture to rise in such a body as this and say, "the acquisition of knowledge is the purpose of the school."

But when we get beyond the definition and begin to write treatises upon educational methods, most of us fall back upon the acquisition of knowledge as the end aimed at, and particularly when we come to administer schools do we conduct them as if the imparting of facts were the only aim.

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[1] The term "knowledge" in this paper is used in the objective sense as covering what is commonly called the "body of knowledge," including both things known and things knowable. This is in contradistinction from the term used in its subjective sense, as the mental process "knowing."

Moreover, this is the popular notion. Ask any boy on the way to school what he goes to school for and he will answer "to learn." Ask his father, why he sends his children to school, and, unless he be an educational theorist, he will answer, "to learn." The public draw their notions from our practice and from their sense of the children's need.

Surely then, a fact so conspicuous needs careful study. If, in spite of our educational theories and definitions, the acquisition of knowledge is both in popular notion and in pedagogical practice the substantial thing in education, it behooves us to consider what is its function. I am well aware that this discussion will seem to the philosopher as trite and unnecessary, to others as futile and unpractical, yet I am moved to start it, tho with fear and trembling, particularly in view of some recent utterances upon educational topics with regard to isolation and analogy; and I am so moved in particular by this very lack of consistency between our definitions of education on the one side and, on the other, by our practical discussion of educational questions, and especially by our administration of the school itself. When the imparting of fact is not merely regarded as the end of school, but when the very lowest and most unpsychological view of the function of knowledge prevails, it is time for a little bestirring of ourselves by way of review of our position.

It might have been better to use the plural in my title, as there are several recognized functions of knowledge in education.

First is the popular and wholly obvious one of serving as the working basis for all effective activity in life, and hence for all education. Such knowledge is called intelligence, and in the popular mind is confused with skill, learning, with knowing how. This intelligence includes acquaintance with the more usual symbols employed in reading, writing, and computing; is naturally essential to any considerable advance in education, and hence is recognized as a sort of substratum for all theories.

A second function of knowledge is to serve as a gymnastic. Thru the act of acquiring knowledge the mind is disciplined. This function when emphasized tends to the disregard of content and to the consideration of disciplinary value alone.

The educational theory based upon it is mediæval in origin, and largely theological. Its type of efficient reasoning is that acephalous amusement of the schoolmen, the syllogism, thru which a man sitting upon a pedestal may learn the world with his eyes shut.

A third function is an outgrowth and expansion of the first. As stated in the report of the Committee of Fifteen, it is to acquaint the child with the civilization in which he is to live; that is, to give him a larger intelligence. This produces a nobler view of the end of education than either of the others, but one which manifestly defies and disregards any definition of education which its advocates would accept. It makes the acquisition of knowledge itself, and not the effect on the mind, the norm. Both this and the first named accept unreservedly a physical as distinguished from a biological analogy for the educational process.

The evident notion of the advocates of both these theories is that the mind is to be stored with useful knowledge, not to absorb and digest it; it is a receptacle, not an organism.

There is a fourth function of knowledge in education recognized by some—by many in theory, by few in practice—namely to furnish nutriment to the growing mind. It accepts frankly and consistently the biological analogy as distinguished from the physical. This is the knowledge of power.

We have had pointed out the dangers attending the use of the biological analogy as applied to education. This is wise, because there is such danger; it is the danger attending the extreme use of any analogy.

Analogy is not identity or even equivalence, and any analogy carried beyond its legitimate application runs into absurdity. Particularly is this the case if the analogy is of a lower to a higher object, as of a material fact to a spiritual truth. Yet, in speaking of, or thinking of, metaphysical ideas, we must use language borrowed by analogy from the material world, for there is no other language. This language is necessarily applicable either to things without life or to living things, it must be either physical or biological. As applied to mind and its laws and education, which shall it be? It has been shown that there is danger in the use of biological analogies; the danger in the use of the only alternative, the physical, is infinitely greater, because the analogy is not only imperfect and inadequate, it is positively misleading, inapt. To speak of the mind as an organism capable of growth, and of education as a process of growth, is surely nearer the truth than to speak of the mind as a receptacle to be filled or a building to be constructed, and of education as filling or storing a building.

Doubtless all will admit the truth of this as stated, but the educational methods and principles, both advocated and put into practice by the majority even of our leaders, are inconsistent with such admission. The ordinary school is totally opposed to it in evident aim, and treats the minds as a receptacle to be filled.

As I have said, the first and third stated notions as to the proper function of knowledge in education rest plainly and almost avowedly upon the physical analogy, the receptacle theory, that of storing the mind with useful knowledge. The first would store it with knowledge for immediate and practical use, the third with wider and higher knowledge for remoter and more spiritual uses, both treat the mind as a receptacle. The second, the disciplinary theory, is a singular mixture of the two figures. The mind is a tool to be sharpened, and a something to be trained as trick animals are trained according to a general extraneous law, not to be nourished with food convenient for it according to its own law.

To make clear that my statement of the case is a fair one, let us consider the kinds of schools which are the products of each of these views.

Two kinds of school are the product of the first, or common intelligence notion — the school of the bare three R's and the so-called commercial school, which in most cases is the school of one R—'rithmetic—(I do not refer to the recently developed commercial high school). Such a school represents the bare bones of education, and, indeed, of knowledge, and none of us would advocate it, and yet the country is full of such schools, and vast numbers of our citizens believe in them and are opposed to any other for the common people. Such schools, so poverty stricken, so wholly inadequate to the training of citizens, are the product of a false analogy — the physical as distinguished from the biological.

The second notion of the proper function of knowledge in education, the disciplinary, is responsible for the "formal discipline" fallacy with all its woes. This theory practically disregards the content of knowledge presented. Any old thing will do. If the first is responsible for the grad-grind school, the second is responsible for the dull grind which kills the school, crowds out the discouraged, over-accents the law of the survival of the fittest, and deprives the school of joy and spontaneity, by forcing upon a child a law not his own. This is serious enough in higher education, but in the elementary school it is deadly. Here it stands for the meaningless repetition of words, for rules without understanding, for language without thought, for drill without content, for life with neither interest nor joy. It is bare, barren, and altogether unlovely. On the ethical side it stands for the breaking of the will, the complete nullification of individual initiative, for absolute, unquestioning, and unreasoning submission to external authority, for formalism, hypocrisy, spiritual anarchy, for force and violence. Its ruling motive is the convenience of the autocratic demagog, its scepter the rod, employed to inforce the *argumentum a posteriori.*

Even in higher schools and colleges it has produced a dull and cheerless routine, a narrow content, drill, and drill, and drill, rigid categorical examination, in short, all the misery and all the futility of the formal discipline of the alleged faculties.

We all know such schools. The worst of them have passed, but they are not all gone. Many are still to be found, and wherever teachers still believe that the chief function of knowledge in education is to discipline the faculties, the school takes on to a greater or less degree the characteristics of its mediæval prototypes.

When we come to the school based upon the third function of knowledge, what might be called the higher intelligence, we reach a distinctly better school, because the range of knowledge is broader, its content richer, and hence the interest of the student greater. It is the school of verbal culture in which a great deal is learned *about* many things. It is at its best in dealing with history and literature, at its worst in the study of nature and social life. For it have been written innumerable books about things: nature books, art books, histories of literature, dealing carefully with the births and deaths of authors, histories of the world, with lists of dates and a few facts appended like tails to kites, information books on all subjects, in short, every possible substitute for real knowledge. It is the school of words, words, words. But as the subjects dealt with are many and those generally recognized as important, it has led inevitably to higher interests. The mind has been "stored" with much useful knowledge, some of which, in spite of the theory, has nourished it. The advocates of this notion have been friends of higher education, as represented in high schools and universities. But the school has fallen short of its true aim. It has been the foe of freedom, of individual initiative, of self-government, of real, as distinguished from verbal, knowledge.

Most of the admitted defects of what are called improved modern methods arise from a confusion of two standards. One of these defects is a lack of thoroness, when by that is meant a half, or superficial, knowledge of many things. The courses providing many subjects were devised originally by those who sought to nourish the mind by abundance of suitable material, they have been imitated and administered by those who, failing to comprehend their purpose, aimed to store the mind with useful knowledge — that is, to have the students commit to memory facts in large number. Hence a multitude of disconnected facts have been presented in ignorance to the children, with the result that little proper nourishment has been received by them, and even the memory has failed to act under this abnormal condition.

Let it be remembered, the great failure in all these schools is the failure to consider the needs of children, their internal, real, personal needs; their need for food whereon they may grow, as determining to any extent what should be given them. This must all be determined from without (witness the *Report of the Committee of Fifteen*). Each child's own mental state may determine the order in which food shall be presented, soup, fish, meat, salad, dessert, but not to even the slightest degree what the food shall be; for he is not to be nourished, but to be supplied. This is a fatal error.

The last mentioned function of knowledge I hold to be its real educative function : that of supplying nutriment to growing minds. Probably most will admit this verbally, but when it is applied in our schools they will be very different from those of the present. When our educational discussion, even in such bodies as this, admits as a fundamental proposition that the minds of children in school are to be nourished by knowledge, a large part of our stock in trade for such discussion will be for sale at a ruinous discount.

This function of knowledge is not only higher than the others, it includes them. Knowledge selected and presented with a view to nourishing the mind also, and of necessity, produces the most useful intelligence, the finest discipline, the widest, truest culture. It is the point of view that is changed, and with it the entire content and the method of education are modified.

This doctrine that the true function of knowledge is to nourish minds, after the biological analogy, naturally demands a careful study of minds, as distinguished from mind, especially of young, immature, and growing minds.

It reduces the possible generalizations upon education and compels us to take account of the individual children. Indeed, it substitutes children for the child. This is a hard doctrine. It disturbs the equanimity of the calm philosopher who sits in his study, reads the philosophy of history, and *ex cathedra* puts forth a general curriculum for schools based upon his philosophical knowledge of the world.

It also disturbs the child-study generalizer who, adopting the scientific method, gathers a mass of facts about children and then generalizes for the mass on the theory of averages.

It compels these at frequent intervals to "go way back and sit down," while the individual teacher studies each child and endeavors to give him the food he needs. This doctrine compels us to admit that the need of each child must, to a very considerable degree, determine both the subject-matter and the method of his education. It asserts that interest, appetite, is one of the indications of need. Of course, it does not deny that there may be bad appetites which may not be indulged, that the child may not have an appetite for what he has never tasted; and hence new appetites may be induced by the presentation of new foods. But this is a mere caution. It denies that all food is fit for all children. It recognizes that a child is not a little adult, but is a very unevenly developed organism, whose proper nutriment can only partially be determined by any generalizations or systems of averages regarding that which is outside of him.

The mind truly nourished by knowledge is not inflated like a balloon, it is not expanded into a sphere, it is not even symmetrically developed; it grows into its environment near and remote, it develops power for use in the world it must live in.

Shutting in a child from his environing world in a world of books and keeping him isolated, that at some time he may be given back to the world, enriched with the knowledge of the past and the remote, has a large and philosophical sound, but it is really sheer nonsense. It suggests the dutiful son who runs away from home in boyhood and after forty years comes back with a fortune, pays off the mortgage on the old farm, and gives his aged parents a fine funeral.

It is the fashion to trace our philosophical notions back to the Greek philosophers. I can think of none upon whom the responsibility for this notion can be placed except the *scholasticos* who advised his son to learn to swim before going near the water. Knowledge is still the acquisition to be put into safe-deposit vaults against a rainy day.

No one holds in greater reverence than I the treasures preserved in literature and the other monuments of men's labors. But the value of all this is manifest only when it makes men more efficient in the present. It is well, it is noble, for men in cloistered retreats to seek out and preserve truths unknown before, because, even tho they may little enrich the discoverers, they enrich the world and will enable others to serve their day. Such search is the exalted mode of serving chosen by the few. It constitutes their life, but this is not education for the many.

In education the study of the school interprets life and life interprets it. The relation is mutual. The riches of all ages and all worlds, in so far as they are disclosed to the eye-minded, merely nourish thru knowledge the student'smind, and hence they give a wider and fuller and deeper insight into the world in which he must live and work, and make higher service possible.

Cloistered isolation suggests two worlds, a double life: that of the immediate present, the pressing environment, and that of the remote in time and space, the world-wide, the world-old. Such a double life, if possible, would defeat its own ends. It would fill the world with learned incompetents. It has produced too many such. Life is one for each, as the soul is one. For its fullest development it needs the richest, the most varied, the most nourishing food; but this must be digested as it is received or it is worse than wasted. Further, it must be used constantly, thru exercise, to give it its highest efficiency. It cannot be acquired in an isolated life, and it cannot be stored up undigested.

Some isolation is necessary in school. It is impossible to apply adequately all knowledge as it is learned. But this inadequacy of expression is an evil, not a good. The effort of the teacher should be, not to intensify it, but to reduce it to the lowest possible terms.

The popular demand for practical education rests on a firm foundation of philosophy and psychology. It is, like an instinct, not to be ignored. The popular error is not in the demand, but in a misundertanding of what is really practical, narrowing it to a few manifest values, as the commercial.

But the people are often wiser than the philosophers. Knowledge acquired in education should be closely and constantly related to life. It should expand life. The double life is absurd. At no time should the content of knowledge given the young for educative purposes be narrow.

It should be as broad as interest and should continually broaden interest. The mind that is filled but not nourished is subject to dyspepsia. Nourishment includes vastly more than the mere acquisition of food, it involves such exercise as shall change the food into brawn. That is, the function of knowledge is to supply, not power, but stuff which may be worked up into power. This exercise may not be merely the effort necessary to acquisition. The body will not thrive thru exercising the digestive organs alone, it will be fat and flabby like the swine which, while fattening, is not allowed to roam at will for exercise. The exercise must be of the organs in which we desire to produce stength. This is the argument against extreme isolation, in school life, and for allying the school as closely with the abounding life of the world as possible.

The fattening animal is isolated from his ordinary natural activities that he may stuff and grow fat. But the animal which is to be trained to service is exercised in activities as nearly as possible like those in which he is to be employed.

The athlete is isolated only from what is harmful, not from activities. He is not shut up in the dining-room. School is life to prepare for life. Knowledge is always the basis — wide, varied, multitudinous knowledge — but as acquired it must be employed.

The test of the value of a theory regarding education and of the sincerity with which it is held is found in the kind of school produced. There are instances enough of the truly educative school to serve as criteria. In this school the children are the first consideration, not merely theoretically and sentimentally, but truly and thoughtfully. Their needs are the basis of all the instruction, and these are determined by the careful study, first of the children themselves, second of the world around them in which they must live, and they are studied together, with the aim that each child may grow into social efficiency, which is the end of education.

Thoroness is not in this school a fetich; only so much of a branch of knowledge is given at a time as can be digested and assimilated. To expect a little child to know thoroly any subject is as absurd as to expect him to consume all the bread in the house before eating any meat. Yet his knowledge is not a smattering. What he knows is thoro in one sense because it is vital. He knows thoroly what he knows, for it is a part of him, after the biological analogy.

The elementary school in which the teachers sincerely and intelligently believe that the educative function of knowledge is to nourish the mind, is the school in which children live a real life of joyful activity. They go to their work with an eagerness comparable only to that with which they approach the dinner table, or play, or any of the many natural activities of body or mind.

There is always a motive inherent in the work, it supplies a felt need.

The activities employed in the process of education are no more unnatural than those essential to physical growth. The mind is surely as natural as the body, and when healthy and normal requires no more a violation of nature for its growth than does the body. But the work of the school is the work of children, and not of adults cut to a smaller pattern. There are activities suitable to children, and they all have an obvious purpose acceptable to the childish mind. Tasks dictated for an end obvious to the teacher alone, altho that end may be the future welfare of the children, do not appeal to them. They certainly do not cultivate that most necessary of powers, the power to labor, to drudge even, for a high tho remote end; for this power comes only from an appreciation of the worth of this remote end, not from blind obedience to another's will.

It is this appreciation of the worth of the end that supplies the inspiration necessary to carry us thru long years of dreary drudgery toward a sought goal, and this end is evident in the true school, resting, according to the biological analogy, upon the belief in the living, growing mind requiring nourishment. It is lacking in all schools founded upon any other basis.

In this school the children acquire intelligence, for the air is charged with it. They not only know the common symbols of the eye-minded; they can apply them in a thousand ways not dreamed of in the "practical" school. They can read and write and cipher, for they continually use these arts to express the thoughts suggested by the countless things learned in their school life, and their intelligence is real, not verbal.

The children in this school receive discipline, for they work as they never do in the other schools. They work with a will, because they work with a motive. They get the kind of discipline that the man gets who toils night and day to perfect an invention for the advancement of civilization. The motive is inherent in, and consistent with, the work itself. It is not foreign and artificial, like a mark or a prize. This is the only true discipline. This develops self-direction, self-sacrifice, the subordination of ease and all lower pleasure to the higher joy of work for achievement. It cultivates moral power, inner law, in place of the hypocritical yielding to external force too often bred in the so-called disciplinary school.

This school also furnishes the higher intelligence, the broad culture, of the third class, but vastly richer and more real. The content of the curriculum in the nutritive school is as broad as civilization, as extensive as the world, and it is approached in such a way as to make the knowledge real.

In no school is knowledge so highly valued — genuine, first-hand knowledge. The whole broadening of the curriculum, which is the most noticeable phenomenon of our modern school, is due to the spread of the belief that the mind is to be nourished by knowledge. Literature, history, science, music, art, sociology, manual training, domestic science, have come into the school thru this door. True, many have accepted them, not comprehending their educational value, but that does not affect the major fact.

In this true school children are made acquainted with their material, social, and spiritual environment as in no other, not primarily because there is such an environment, a knowledge of which is useful, but because this knowledge furnishes the best nutriment to a mind growing into organized society, a society whose subordination of its material environment to spiritual ends constitutes its chief claim to superiority.

This school is the school of expression. The children engage in numberless activities employing all the powers of their minds. They express in varied ways what they receive. Thus they make it their own, incorporate it into the very constitution of their minds. The knowledge is not stored up against the day of comprehension; but by the exercise attendant upon the various means of expression it grows into the fiber of their beings and makes them strong and adaptable, as the athlete by exercise makes his food a part of himself.

In this school is freedom and joy and hard work and discipline and abundance of knowledge, because the center is a child, a growing child, needing nourishment rich and varied, and every activity engaged in, and the knowledge imparted, is prepared to meet his needs. Thus and thus only is a child best fitted for social efficiency; and social efficiency is the end of education.

DISCUSSION

JOHN W. COOK, president Northern Illinois State Normal School. — One cannot listen to the strong and interesting paper of Superintendent Gilbert without finding much that will meet his approval. It is with the central doctrine of the discussion, however, that I desire to deal. I do not agree with the speaker in his assertion that we are shut up to a choice between a physical and a biological analogy in discussing psychical phenomena. Is it true that in the development of mental science there has been no creation of terms having only a psychical suggestion? Are we obliged to deal exclusively with simile or metaphor and to convey our meaning by illustrations derived only from the operations of inorganic agencies or those involved in vital phenomena? If such be the case, then we must commend those authors who have endeavored to illustrate the truths of pyschology by an appeal to the imaging activity and have illustrated their books with botanical monstrosities whose branches were labeled with the common terms employed in describing the various forms of mental activity.

I regret that Mr. Gilbert has not aided us by a clear definition of knowledge. Do I fail to understand him when I am unable to discover any distinction, in his treatment, between fact and knowledge? The terms seem to me to be widely apart in meaning. I am not unaware of the custom of using the word "knowledge" in an unscientific way, but, in a discriminating discussion, greater care is expected in the use of words. Common usage undoubtedly regards knowledge as objective. It thinks of it as having independent reality in the world. From this point of view, education is a process of going forth to find knowledge, as one would go to seek any created utility. Having found it, one must become skillful in its use, for it is an instrument by which social needs may be satisfied. It is assumed that all that the mind lacks is skill in the employment of knowledge. There seems to be a complete overlooking of the fact that there is only the possibility of a mind before this experience with knowledge. Mind creates itself, and this it does by contact with this mystery that is named to us in a vague sort of way by this common word.

I am not one of those who deny any objective reality to knowledge. There is a sense, I think, in which it may be so regarded. The universe is instinct with thought that awaits interpretation by mind, an essence like unto that which is responsible for the substantial frame of things in which we find ourselves and whose offspring we are. Looked at in this way, knowledge may be thought of as objective, as having reality independent of any mind, except the infinite mind. In a truer sense, however, knowledge is a mental process in which universals come to have their real existence in individual minds and to constitute the content of those minds.

My objection to Mr. Gilbert's view of the function of knowledge has been stated with great precision in previous discussions in the Council. The assumed analogy is misleading and embarrassing. The physical organism attacks certain substances and reduces them to their primitive elements before employing them to create its own substance. In no sense is what I have called objective knowledge so treated. I am willing to concede that mind creates itself thru its activity with ideas, and that the body builds itself thru its treatment of food; but the two processes belong to such widely separated fields of activity that they lack a common factor by which they may be compared.

What we are seeking is, rather, that function of knowledge which should dominate the school. Knowledge is the indispensable guide to all intelligent activity. It is the nature of mind to manifest itself under the forms of knowledge, and all other manifestations of the intellect and will are aberrations; hence Mr. Gilbert's first function is not only a legitimate but a necessary end at which the school should aim. Unless men are to go thru life with a blundering touch and a halting step they must acquire skill in the control of ideas. This comes only thru mechanical repetition; hence the gymnastic function is also indispensable to any high development. As to the third view, Mr. Gilbert's treatment appears to me to be superficial. He looks upon the civilization of the time as lying, in some mystical way, in the mind as objects may lie in a receptacle. If I understand what is meant by "the civilization of the time" it is only the mental constitution, the mind-stuff, of the men and women of the time. It is not something self-existent and objective, but is the soul-life, the mental habit, the essential constitution of spirit, of the time. Now, it is the purpose of education to organize mind in a rational way, to introduce reason to itself, and, so far as reason has found itself, it has manifested itself in "the civilization of the time." Unless one is to dwell in hermit solitudes there is no other alternative. To oppose such a view is to advocate an isolation from which there is no return.

SUPERINTENDENT GILBERT.—I must insist that I used "knowledge" accurately and in no material sense. The use of the term "body of knowledge" is clearly approved by the best lexicographers. I used it deliberately in preference to the term "fact," as being broader and more comprehensive.

It is true, the term is also used as referring to the act of knowing, a mental process. I use it as the best term to describe that objective body of knowledge which constitutes the nutriment of the growing mind.

I desire utterly to disclaim any use of the term which could be taken to suggest that knowledge is a material thing. It is to protest against that proposition that this paper has been written.

I desired to make clear, and I believe I have made clear, that the mind in education is to be treated as an organism, and not as a receptacle; that it has life, is really a living thing; and that nourishing a living thing is a better analogy for the process of education than filling a lifeless thing.

All language applied to the world of metaphysics is analogical. You cannot escape it. You cannot get away from your ancestors.

The question is: which analogy is more apt, more truly spiritual. We all believe, necessarily, that the soul should be regarded as living.

I am especially concerned in the character of the school which is the product of the analogy we choose; on the physical analogy, the school of force, of stuffing, of rank materialism; on the biological analogy, the school of self-activity, of freedom, of spiritual life.

I believe that we agree on this in spite of quibbling on words.

THE DIFFERENCE BETWEEN EFFICIENT AND FINAL CAUSES IN CONTROLLING HUMAN FREEDOM

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There are two kinds of causes with which we are familiar, namely, efficient causes and final causes. From earliest infancy we begin to recognize that the action of one object is followed by a change or modification in another object. The fire makes cold water hot. Too hot drink burns and gives pain to the mouth. The fall of a plate on the floor makes a noise; so does the heavy step of the servant. The scratching of a match makes a light. Sugar makes a sweet taste in the mouth. A rose, a pink, or a violet produces an agreeable smell of some sort and a pleasant appearance to the eye. Eating and drinking sate hunger and quench thirst.

Our earliest experiences, as well as our latest, deal with causal actions, not only of things upon our five organs of sense, but of things upon each other. Almost as early as our observation of this kind of causality, exerted by one thing upon another external to it, there enters into our experience a different order of causality, namely, the action for a purpose; the doing of something with an end and aim; the change of something to accomplish an object.

The child soon observes that he is moved for the purpose of bringing him to his food; or for the change of a garment; or for his bath. He is carried to the window to look at objects in the street; he hears soft voices addressed to him. His cries as some pain or discomfort are followed by things done to him with a purpose to relieve him. In short, he finds himself in a world of final causes.

Philosophy has called these "final," because they relate to ends; *finis* meaning an end not only of an extent or duration, but also an *ena and aim*, an object to be attained, and hence the purpose or motive of an action.

The efforts of the people who have the care of the infant child are directed to interpreting his real wants from his inarticulate cries and impulsive gestures, and in the next place to setting into operation some train of ordinary causes involving food or drink or clothing, or whatever will satisfy some real need, and as a secondary object gratify the child. His real needs and his desires may be and often are diverse. He does not always know what is good for him. But as he grows in knowledge and power of observation, he comes to see that there is a general intention on the part of parents, nurses, and even of doctors, to secure his welfare.

Of the two kinds of causality in the world of the infant, the chains of efficient causality seem to be set a-going and to be controlled in the interest of purposes or motives. In other words, final causes seem (to the infant) to govern efficient causes. But as his experience widens, he comes to see more and more of a great outside world where efficient causality goes on without discernible purposes. There are collisions of elements and great processes which are not initiated by a purpose and do not result in some useful object, or at least any use made of them must be forced on them by some living being who chooses to adapt them for his use.

The human infant learns soon the two kinds of causuality and looks for them everywhere. As he passes on into youth and mature age he acquires greater readiness in discriminating the effects of the two kinds of causes. He more readily recognizes a phenomenon as a link in a long chain of causes, as belonging, in fact, to the course of nature. Its origin is out of sight. Another phenomenon is recognized by him as proceeding directly or indirectly from a self-active being, a living being which is building and nourishing a body for itself, or perhaps undertaking reactions upon its enviroment, reactions that originate in instinct or impulse or will, as in the case of animals or men. He recognizes that living beings possess and use the power of originating new causal chains. When he has traced some of these chains back to the plant or animal or man he stops with satisfaction, having found an adequate originating cause. But in the causal chain formed in the course of nature, he does not find satisfaction in any link or member of the series, but seeks at once another link and then another in infinite progression. For he has learned that no link or member of a series can be a first originator unless it possesses the power of forming a purpose or motive for its action.

Here is something very wonderful to the psychologist. In order to have a new series begin there must exist the power of forming an ideal different from the real. This power must be able to desire the different; or at least to move inwardly by instinct or impulse, and impose upon its environment new shapes. Every seed has in it, so to speak, the ideal of the structure which its growth to maturity will reveal. The vegetable cells may seem to be all alike to the microscope, but each one will develop its own kind of actuality. The cell of the cucumber will not develop into an oak, nor a cell of the acorn into a cucumber or a cabbage. These all may feed on the same elements of the environment—carbon, oxygen, hydrogen, silicon, calcium, but they organize the result each according to its own individuality, giving the specific form of its own being, whether oak, cucumber, or cabbage, to the combination.

In the higher orders wherein instinct has become desire, and where sensibility and locomotion have been added to mere plant life, traces of responsibility begin to be seen. Self-activity, even in the plant, has originated new chains of causality; but in the animal its ideal begins to be formed as a purpose separately from its realization. The beaver sees his hut in his mind's eye when he comes into the presence of the trees growing by the side of the brook. He sees, after his manner of thinking, the dam that he will make, and the pond that will result, and the hut that he will build. He perceives the reality which consists of a brook and some trees, and he forms for himself an ideal in which the present reality will enter only after much modification. After this he begins to fell the trees by gnawing them off, and to divide them into proper lengths.

Here we notice two important steps in self-activity—the first the formation of the ideal or purpose, and the second, the transformation of the real into the ideal or according to the plan.

The formation of the ideal or plan cannot be explained by the action of the environment upon the beaver, for the plan is his own reaction upon the conditions that he finds existing. He perceives them as they exist, and proceeds to annihilate or modify those conditions; first, in his plan he thinks a pond where there is only a swamp or dry ground; he thinks trees now growing beside the brook as converted into short sticks and as built together into a dam and a hut. All this has originated within the beaver by his own self-activity. But the real has not yet been changed one whit, altho what may be regarded as a dangerous conspiracy has been formed against it.

Psychology takes note that another act of self-activity now supervenes and the beaver attacks the existence before him, deprives the trees of their life; stems the free flow of the brook, and performs whatever is necessary to change the landscape into a home for beavers. There were in existence before this happened many forms of life of lower order than the beaver, and still more forms of inorganic life immersed or sunk in the long causal chain that goes back to the purpose which is to be found in a creative Reason who originates the world-process. But the beaver has made a great impression upon the reality and converted it into his own reality. Other nature, the trees and grasses, the rocks and the soil, the water in the brook and the channel it has worn for itself— all these are used by the beaver as mere material to build with. The beaver is responsible for the modifications he has wrought, and his actions have been of the two kinds described: first, the formation of his ideal, and secondly, the destruction and adaptation of the real in such a manner as to make it correspond to his ideal.

Let us pause at this point and remark that there are two schools of metaphysics that in the presence of the facts of experience which we have just now summoned before us, adduce different, or, rather, opposite theories to account for those facts. The first of these theories is the mechanical theory which makes efficient causality all in all. It announces that everything that is or has happened exists because something else outside of it made it to be so or to happen so, and there is no such thing as self-activity, all appearances to the contrary notwithstanding. Whatever appears to be self-activity; and the origination of new chains of causality is only, after all, a link in the great chain of correlation of forces which has no beginning and no ending. Science has taken for its problem the discovery of the simple mechanical elements that masquerade under the forms of life, the plant and animal, and under the widely variant and complex forms of human life. I think that there are a majority of scientific men, as they are found today thruout the world, who hold this view of the explanation by efficient cause alone of all the phenomena in time and space. They would explain away the second order of causality, which we find in all our experience, by thinking it into the forms of simple mechanism of dead elements moved only by impact from outside.

The other school of metaphysics, which dates its beginning with Plato and Aristotle, holds that both causalities exist—efficient and final—but that final causality is a higher form that subordinates mechanical causality under it as being fragmentary and incomplete.

This second metaphysical view is theistic and holds that the Absolute is a Personal Reason who creates the lower order of causality in order to nurture into being infinite human creatures—making time and space a cradle in which to develop the independent individuality of free, immortal souls, an act of infinite grace and loving kindness.

At first, when one hears this stated in a dry, psychological way, he does not realize all that it means. He must see its application to the world of nature and the world of human institutions before he can see its importance.

Inorganic nature does not furnish much difficulty to the mechanical metaphysics. It does not show any obvious traces of internal purpose, and no freedom of activity—no self, in short. But in the case of human institutions, purposes, ideals, ends, and aims are all-important.

Take the explanation of the development of civilization on the mechanical theory, and it is the inorganic that makes the organic. Climate and soil and productions make the civilization. According to the second theory, which adopts self-activity, both theistic and human, as true being, and also as the purpose and end of the process of development in nature, one sees civilization as moved by a series of great ideals. These ideals inspire the conquest over nature and use of it for combination of man with man. Final causes dominate in history, and not efficient causes.

With this conviction we study the genesis of each nation's ideals and note how clearly or how obscurely a people sees that it is the highest object in life to be free themselves and to make all others free. It is not sufficient to have a perfect government that rules paternally a large population, making life and property safe — it is necessary that the people should be self-governing also. The more a nation can realize in each of its citizens what it secures for the whole, the better it is. The far-off ideal that hovers before the vision of History is the nation where each citizen consciously partakes in the observation and thought of all mankind, and lives in the perpetual view of the great process of world-history as it unfolds. Such a view sees the doings of divine Providence.

In history, therefore, final causes are by far the most important.

So in the fields of art and literature, final cause and purpose rules.

In painting and architecture and sculpture we have the portrayal of freedom attempted. Human collisions are depicted and the triumph of reason is shown.

There are two kinds of freedom depicted — that of Greek art, which shows freedom in the body in the form of gracefulness, and that of Christian art which portrays freedom from the body, as shown in heroic fortitude in asserting the higher life in the presence of pain and bodily sorrow in the wordly career.

In art the purpose, the ideal of the character portrayed, is all-important, and mechanical causality holds only a subordinate place.

So in theology we are on the search for the explanation of the enigmas of the world by means of a divine purpose which reveals itself in nature and history.

On the mechanical basis of merely external causality, there is no freedom possible, nor is theism possible; and art, as the spectacle of freedom, becomes the caterer to the saddest of human delusions, the delusion of mortal men who believe themselves free agents, the rulers over fate.

Psychology in the hands of the mechanical metaphysics explains thought as a function of the brain and not the brain as the creation of the soul seeking to make an organ for cognition and volition. The cortex of the brain, the fundamental nervous system, the organs of digestion and circulation, the muscular system, are not the means and instruments created for the development of intellect and for its conquest over the world, but the mechanical cause is the founder, and the intellect and will and heart of man are its race.

It is in the spirit of the mechanical metaphysic that the skeptical argument against human freedom was invented. The spiritualistic metaphysics had said much of motives and final causes, and of freedom in choice.

The skeptic replied: "A man must always act according to the strongest motive. Freedom to man is impossible — nay, it is impossible even to God, because he is necessitated by his highest and best motive."

A psychology in which only one form of causality is recognized could not answer this skeptical objection to freedom according to motives.

But a psychology that is founded on a knowledge of final causes has no difficulty with it. It sees a possession of motives or purposes or ideals to be an infallible evidence of a twofold power of origination—first, the power of forming and thinking an ideal in the place of a real, and, secondly, the power of realizing this ideal by acting upon the world. The essence of a purpose or motive consists in offering something else in the place of the real that exists. It wishes to do away with that which exists, and to put something better in its place. Now it is clear enough that what is now non-existent, namely, the improvement on what does exist, cannot be an outside necessity compelling the mind and depriving it of its freedom, for the motive or purpose is only an idea in the mind, and has no other existence than that which the mind gives it. The mind cannot be fettered by that which exists solely through its own pleasure.

Secondly, if the motive or purpose gets realized, it gets its realization through the act of the will of the free being. The ideal is the product of the will acting through the intellect, and the realizing of the ideal is the product of the will acting on the muscular system.

Hence a true or comprehensive psychology re-establishes the doctrine of the freedom of the will through motives, purposes, or final causes. It shows the error of the mechanical psychology to be caused by its mistaking of ideals for entities independent of the soul, which have power to constrain the soul, whereas motives are only the *proposed* existences and not the real existences—if they were real already, they would not be motives or final causes of action. If the beaver's ideals were already real existences, he would not see the brook, and the trees, but a pond already made, and would have nothing to do.

A true metaphysics, moreover, shows where the mechanic metaphysic falls short, fatally short, even of the demands of natural science.

I will close my paper with a brief description of the dilemma to which the mechanical causality reduces itself.

An analysis of the idea of cause finds wonderful things in it. The activity of a cause proceeds beyond itself to another, but its activity is its own. There must be origination, or else there is no cause, but only a transmitting of causal influence that comes from beyond. Origination means that there is an absolute beginning of something. But the beginning is the activity of the cause within itself. The idea of cause, therefore, involves the highest of all ideas, namely, that of self-activity. Take self-activity out of cause and there is left nothing but effect. A bad metaphysics, like the mechanical theory of the universe, often explains the idea of a causal series as a series in which every link is the effect of the preceding link, and no link is the originator of anything new. This destroys the idea of causality, because it makes the entire series an effect and denies origination to any member of the series. In this the conception is that the causal influence is received and transmitted by the entire series, but that the causal influence comes entirely from outside of the series, and is not to be found in any link or member of it. Each and all transmit but do not originate. The cause in this case is transcendental, that is to say, its originating action is entirely beyond the realm of experience—experience deals only with results. The point of interest is that the ordinary mental operation of connecting phenomena with one another by the idea of cause presupposes a transcendental idea, the idea of self-activity, entirely out of and beyond the causal series.

That bad system of metaphysics, the mechanical theory, also endeavors to get rid of the idea of self-activity. In its analysis of causal phenomena it, therefore, denies origination not only in each and every member of the causal series, but it does not assert that the causal influence comes from beyond; its object is the avoidance of the idea of pure causal influence—it thinks to escape the concept of self-activity altogether. In this we see that it has stultified itself, because in eliminating the idea of causality from the concrete series of events in experience, it has reduced them all to effects, pure and simple, and if these effects are without a transcendental cause that originates the influence that is transmitted by the series, then it follows that it is incorrect to describe the members of the series as effects, for surely that which has no cause is not an effect. But without a cause, the unity of the series vanishes and there is no connection between any member of the series and its antecedent or consequent. One follows another in time, but is not connected with its antecedent or consequent by a causal influence. Since no member of the series is a cause, and consequently no member of the series is an effect, the denial of transcendental causality has resulted in the denial of all causality.

Without the idea of causality, all knowledge, all thought, all science collapses entirely. There is nothing in any one observation which leads us to inquire for its explanation in another observation. There is no dependence of one thing upon another whatever. The most startling result of this conclusion is the production of a spurious theory of idealism—a result evidently seen by the most acute thinkers among our scientific men.

Each sense perception implies, in the first place, a sensation, an act or activity in some one or more of the senses. Secondly, it implies the perception of the dependence of the sensation upon an object outside of it. Without the causal idea no sense-impression could be interpreted as the perception of an external object. The feeling would be entirely subjective. It is unnecessary to mention further that there could not even be a subjective feeling without presupposing the idea of causality, because even a subjective feeling discriminates between a subject which thinks or perceives, and the pain or pleasure or other feeling which is its object, and thus it becomes representation, and this is a causal activity of the purest kind, namely, a *causa sui*, or self-activity.

I leave the subject here, knowing that all who deal with education will know how to appreciate the superior advantages of the theory of final causes over that of mechanical causes in explaining to the child and youth the civilization in which he lives, and in leading him into the insights of art and literature, of religion and philosophy.

THE EDUCATIONAL PROGRESS OF THE YEAR 1901-2

WILLIAM R. HARPER, PRESIDENT OF THE UNIVERSITY OF CHICAGO

In attempting a survey of the progress of educational work during the period of a single year, one quickly discovers three or four things: (1) that such a survey will contain no adequate presentation of the mass of material which may rightly lay claim to be included — a volume of hundreds of pages being hardly sufficient, much less a paper of forty or fifty minutes; (2) that no sharp line can be drawn between different years, since the more important events really assume the nature of movements, and most of them cover a period of several years; (3) that prejudice against taking forward steps in education has been greatly diminished, and skepticism as to the value of the old conventional usages in schools and colleges is largely on the increase; (4) that, whatever may have been true in the past, no very close connection any longer exists between the educational movements of England and the continent, and those of our own land. At all events, we may no longer be counted merely as followers; in some respects, we may perhaps claim the position of leadership.

In the field of *elementary education* the most significant single event — that which has touched the largest number of persons and affected them most keenly — has been the death of Colonel Francis W. Parker. As in the case of most men who have accomplished much, the greatness of his work was not fully apparent until he was taken away. The universal appreciation of his leadership, the universal testimony to the greatness of his career, and the universal mourning over his sudden death, together constitute the most striking event of the year. That he should be taken away at the very moment when he was about to enjoy the fruition of a lifetime's work, and that he should not be permitted to enter the buildings on whose plans he had spent so much time and energy, was indeed pathetic; but that he had built foundations broad and strong for future work in the field of elementary education; that he had made noteworthy contributions to the cause of public-school education; that, indeed, he was one of the great leaders of the last quarter of a century—is everywhere acknowledged. Altho he was an officer of the University of Chicago, I may be permitted to say these things, in view of the fact that his connection with the institution was so brief; and I am sure that the general educational public will approve the policy adopted by the university, to go forward with the work which he established and to undertake the accomplishment of this work in accordance with his purpose and his spirit. To this is pledged the faculty of the School of Education, so closely connected with him personally and officially, and to this is pledged also the new director, Mr. Dewey. It is not too much to expect that this faculty shall develop, on the foundations which have already been laid, a great and noble institution from which good and only good shall emanate for the public-school system of the country.

The curriculum of the common school in these last years has greatly expanded, and now includes much material drawn from the departments of natural science, drawing, art, manual training, as well as from those of history and literature. This material is so various in its character and so large in its amount as to produce "a stuffed condition of the school course which occasions uneasiness and distress." The "new education" has given us certain problems that urgently demand solution. It is generally understood that these problems group themselves under two heads: (1) how to select in each department of study the most important topics for treatment, and (2) how to bring these various departments of study into such relationship with each other that each will contribute to the other, and that waste shall be reduced to a minimum. So far as I am able to gather the facts, it may be said that no new principles or theories have been projected during the past year. Leaders in the new education have concentrated their efforts upon its practical side. In many quarters there has been conducted quiet investigation of the problems just mentioned. The educational theory and practice, which is based on the teachings of psychology and the history and development of the culture of the race, is becoming more and more generally accepted; but it requires just such critical and scientific study as that which is being given it in educational circles thruout the various sections of the country. The changes that have already come are almost greater than can be calculated. It is essential, however, that the severest tests be applied, and that the most rigid scientific criticism be encouraged.

No one can fail to see the increasing acknowledgment in the modern education of the child of the importance of training in æsthetics. In more than one great center there has been manifested a growing desire to decorate and beautify the buildings. It has been suggested that perhaps in no former year has greater interest been taken in the architecture of the school buildings than during this year. The work accomplished in this regard in the cities of Boston, New York, and Chicago deserves especial mention.

It is true, perhaps, that the teacher is beginning to recognize more clearly the importance of study for the sake of information as distinguished from that of method study. This difference is the old bone of contention between the normal school and the college. A radical step, and one which seems to acknowledge this general principle, has been taken during the past year in the city of Chicago. The city normal school, whose function it is to train teachers for the elementary field, has advanced its course of study to three years, and has made its requirement for admission co-ordinate with that of the leading colleges in the country. This step will surely be followed by other normal schools. In establishing and maintaining such scholastic standards, the public normal schools join with the schools and departments of education in the colleges and universities to strengthen the equipment which has hitherto seemed sufficient for the corps of elementary teachers. The old requirement was that of the high-school curriculum, with the adding of one or two years of professional training. This means that larger familiarity with the subjects taught—in other words, broader scholarship—will henceforth be demanded. The most serious drawback to the advancement of the work in the elementary schools along the lines of the educational theories of recent times has been the utterly inadequate scholastic training of the teachers who undertook professional investigation. This need of broader scholarship has nowhere been more deeply appreciated than among the teachers themselves, and in testimony of this statement we need only recall the interest and support of that great multitude of elementary teachers who spend a part of their vacations in the summer schools and colleges. The encouragement of summer study by the superintendents of the great cities, and the avidity with which such opportunities have been seized, present a situation heretofore unknown; and one from which the greatest possible results may be expected. It is not method study simply that these teachers hunger for; it is rather information on special subjects in which they have discovered their weakness.

This suggests another characteristic of the teacher's work, which stands today in marked contrast with that of even recent years. I have in mind the larger freedom accorded each individual teacher: freedom from the old conventions and ideas as to what constituted curriculum as well as method. The breaking up of these formal conceptions has resulted in a spiritual liberty formerly unknown and capable of producing the largest efficiency in the work of the individual teacher. The work is no longer so mechanical. The presentation of these new subjects compels variety of method, and it is a noteworthy fact that with this greater freedom from conventional treatment there is a growth of mind and spirit which gives an inspiration and arouses an enthusiasm incomparable with that of the old régime. There are some who think that this freedom of the teacher has had its origin in the efforts made within these later times to adjust the work of the school to its environment; to have the child study things instead of studying about things; to bring him into contact with real life instead of that which represents life. It has seemed to me that all of this is strictly parallel with that freedom of the teacher which is found in elective work as compared with work prescribed; and, while in the latter case there will always be prescribed work, and in the former case we must recognize the necessity of a certain amount of rigidity, in both movements we are tending toward larger spiritual as well as intellectual liberty.

The friends in the stronghold of kindergarten work, Chicago, have been greatly exercised lest a backward step should be taken in this important field. At times it seemed to the public that the whole department of kindergarten work was to be abandoned in the city of Chicago for lack of funds. It is probable that nothing could have done more to arouse the public interest in the subject than the danger which was thought to exist. It may be said with confidence that at no previous time has the position of the kindergarten work been more strongly established; and to my mind this constitutes one of the most important facts in the educational history of the year. The place of the kindergarten has been established in the minds of the great majority of Chicago citizens, and all future budgets must contain liberal provision for this division of educational work. The superintendent of Chicago schools has strongly favored the placing of kindergarten work in the schools, especially in those of the poorer districts. In arrangements made for next year, the same number of schools as for last year has been retained; but their effectiveness has been doubled, so that twice as many children will be cared for.

Much may be expected from the campaign now being made in Michigan in behalf of the centralized rural school. Strong public sentiment has been aroused, and while hitherto the state grange has opposed every movement in this direction, a large part of its membership has come to advocate the proposed change. The district schools will be great gainers from this movement.

An interesting development in connection with the rural schools, especially in the states of Wisconsin and Missouri, is to be noted in the introduction of instruction in agriculture. This, of course, corresponds to the introduction of industrial, or manual, training in the city schools. It is an application of the now generally recognized principle of bringing the school work into close touch with the home life of the pupil; and it may safely be predicted that no more important application of the principle has yet been discovered. The nature of the subjects thus introduced, and their pedagogical possibilities, combine to make this step one of marked significance in the history of education. The complete reports of the revision of the public-school system of Ohio have not yet been published, but from private information it may be said that a most rigid revision of the system has been adopted, and that the Ohio public-school system may henceforth take its place side by side with that of other states which have in these last years made great progress.

In addition to the significant step taken by the board of education of the city of Chicago in enlarging the curriculum of the state normal school from two years to three, mention must also be made of the even more significant action involved in giving the superintendent an appointment for five years instead of one. This action, coupled with the general policy adopted in connection with the appointment of teachers, the large number of new buildings provided for, make the past year one of the most eventful in the history of the Chicago schools. It is generally recognized that these forward steps are in accordance with public sentiment, and are the outgrowth, in large measure, of seed sown in former years. The splendid battle fought in 1899 and 1900 by Mr. Andrews, now chancellor of the University of Nebraska, has secured results which but for this battle would have been impossible.

The Southern Education Board, which was the outcome of the Capon Springs conference held in Winston-Salem, N. C., in 1901, has already shown its strength and its power to accomplish good results. For the first time in the history of southern education a comprehensive undertaking has been launched founded upon true principles. That educational work in the South should have to do with the education of the white man as well as the negro; that it should be worked out, for the most part, by southern men; and that it should begin with the public school in the South, are principles which appeal directly to the common-sense of every intelligent thinker. It is confessedly true that the southern states have not received their proper share of the great gifts for education. Twenty-five per cent. of the population of our country should receive a larger proportion than 3 per cent. of the general contributions to education. The Southern Board will surely have the sympathy and co-operation of every friend of education in the North, and it is a source of satisfaction that in the membership of the board we recognize the names of men who are known in the North, as well as in the South, for a true interest in sound education. The distinctive interest of this board, as has been officially announced, is in the public school, and it is particularly concerned in those forms of education "which look toward thrift, industry, and usefulness." This fact will guarantee, in part at least, the adoption of the principles of the new education. Dean Russell of the Teachers College, New York city, in a personal letter makes this statement:

> We have been changing our conception of what education is. Formerly the school aimed very largely at *learning*. Now we are including *doing* as an element in a good education that should perhaps be as prominent as the learning. We are stimulated in this direction by the Southern Board above mentioned, for they stand very strongly for industrial education, in which a student consumes perhaps half of his time in the study

of books and in reflection, and the other half in *doing* or *making* something. In my opinion, this tendency of the Southern Board and of the southern schools is reacting powerfully upon the conception of education in the North. In fact, for several years Hampton has been a most ardent advocate of an education which gives about equal prominence to learning and doing, and in this respect has been in advance of northern institutions. We seem to me to be gradually accepting the Hampton view in the North, altho we have been approaching the same idea from another side. The nature of the child, of course, requires a large amount of motor activity, and the demands of society also favor a kind of education which includes the execution of one's ideas. These latter two facts, therefore, as well as the influence of the Hampton and Tuskegee schools, have led us to make a great advance in favor of more *doing*, making, executing, in the common schools.

As a result of this advancement, the three R's are not crowded out, but they are growing relatively less prominent, and much greater emphasis than heretofore is being thrown upon proper materials with which to work with the hands in the schoolroom. Just as the kindergarten has given much study to the gifts, that is, to the materials out of which the children shall make all sorts of objects, so the elementary-school teachers are being stimulated to make an extensive study of the proper materials to be used for construction of objects in grade work. Thus we are debating about the extent to which clay, paper, pasteboard, wood, bent iron, etc., shall be used, and this will probably be a more prominent topic in the future.

A still more recent forward step in the interests of southern education is the organization of a body called the General Education Board. The function of this board is entirely distinct from that of the Southern Education Board. The latter exists for the purpose of developing an educational sentiment. The former board has been organized to receive, hold, and dispose money for southern education. The board has already at its command a fund of more than a million dollars. Its methods of work are those born of large experience, and its breadth of sympathy and its wisdom have already been satisfactorily administered. No stronger agencies, no agencies more greatly needed, have been established in any sphere of work, educational or industrial, in this last year, than the agencies named — the Southern Education Board and the General Education Board.

In connection with the curriculum of the *secondary schools*, four or five tendencies may clearly be noted. Some of these are progressive; some of them may, perhaps, be regarded as characteristic of movement backward. In the latter class belongs, in the opinion of the writer, the disposition to give up provision for instruction in Greek. That there exists such a disposition cannot be denied. It seems to grow out of the desire to make way for more practical subjects; but the fact is that as many people desire Greek today as at any time in the past. The more practical subjects are called for by another class of students. The introduction of business and industrial courses is rapidly increasing the number of high-school students, but these new students are in addition to those who otherwise would take up high-school work. It is difficult, of course, in most communities, to make provision for a subject in which the class is ordinarily so small, but, by proper arrangement of courses, such work can be provided for in connection with the Latin at a minimum of cost. And especially in this great western country should every effort be made to conserve those studies which represent the ideal in thought and life. Principals and teachers will do well to read that most interesting paper, prepared just a year ago, on "The Social Need of Greek," by Mr. E. Benjamin Andrews, in which he shows so conclusively that, "while a majority of educated persons in a society may be ignorant of Greek, all cannot be; a remnant large enough to diffuse the cultivation proceeding from it must know the tongue, and that at first hand." His conclusions were, in part, as follows:

> 1. Social, and not merely individual, needs should be borne in mind in all large educational planning.
>
> 2. All believers in a rich and rounded social education should feel, think, speak, and act appreciatively toward Greek study.
>
> 3. Colleges and high schools with reasonably ample facilities should be encouraged to continue teaching Greek if already doing so; if not, to begin.
>
> 4. Since the excellence of the Greek discipline is less obvious than that of most studies, teachers should see that pupils likely to profit by it in a high degree at least consider this discipline, and should advise those pupils, if they wish, and such a course is possible, to elect and pursue Greek.
>
> 5. Pupils in Greek who show special ability and taste for it should be urged to the utmost proficiency in it.

A second tendency, already noted, is the introduction of courses of instruction relating to commercial and industrial subjects. The passing year has seen great strides forward in this particular. Is this phase of secondary work moving perhaps at too rapid a rate? We must not forget that years are required to develop a new subject for practical educational results. Are we throwing aside those subjects, whose educational value has been tested beyond question, for the sake of introducing new subjects which, at all events, for a long period must prove to be of lesser value? The present writer has no desire to make objection to the introduction of new subjects, provided such introduction is accomplished cautiously and judiciously. Objection is made only to the adoption of too large a number of new subjects, for which good methods have not yet been found; to the promiscuous and miscellaneous use of anything that meets the demand of a passing craze. In any case, in meeting the demands thus made, redoubled effort must be put forth to work out the methods by which this new material may be adapted to the needs of a true education. It must follow, as a matter of course, that, if elementary instruction draws material from the industrial, political, commercial, and agricultural realms, such material must also find its place in secondary instruction. But the problems connected with its introduction are not such as to find easy solution; and it may fairly be questioned whether, up to this time, the results achieved have been in any sense satisfactory.

I would not suggest that this work is not to be continued, but it must be acknowledged that the most urgent need exists for caution and for a scientific study of the questions involved.

The third tendency which, during the present year, has attracted special attention is the substitution of the certificate system for examinations in connection with college entrance. To those of us who are familiar with the working of this system in the West this proposition has in it nothing that is new. It would seem, however, that this idea, born in the West, is making its way slowly but surely into the eastern sections of the country. The indications are quite clear that before long the certificate system in one form or another will be adopted by eastern institutions. An important step in this direction has been taken within the year by the United States Military Academy at West Point. In accordance with recent regulations made by its faculty and approved by the secretary of war, candidates who are graduates of high schools will be accepted for membership in the first year. The regulations of the Military Academy are more liberal than they should have been made, inasmuch as graduates of three-year schools, as well as those of four-year schools, are eligible for admission. A modification of these rules will be adopted.

The success of the College Entrance Board of the Association of the Middle States and Maryland has been greater than could have been anticipated. The work of this board is an intermediate step between the eastern plan of entrance examinations set by each college for itself and the western plan of certificates. It is openly asserted by some of the strongest adherents of the College Entrance Board that its work is paving the way for the adoption of the more general certificate plan. In this connection I might quote from a letter written me by the principal of a prominent New England academy: "The most important event of the year, in secondary education, has been the expansion of the work of the College Examining Board into New England, whereby at present all the New England colleges, excepting Harvard, will receive the College Board certificates in place of their own examinations."

At several meetings of the high-school and college teachers, held last autumn, in New England, to discuss the question of joint boards of examination for entrance, such as the middle states have adopted, this movement, tho strongly urged by Harvard University and by Yale University, was overwhelmingly defeated. On the other hand, a motion made to revise, co-ordinate, and extend the certificate system met with great approval.

It is thought by some of the ablest representatives of secondary education in New England — among others Principal Coy of the Hotchkiss School — that the experience of the past year includes as an encouraging feature the change on the part of the colleges to revert to the old standards of requirements which laid emphasis upon power and discipline rather than upon technical knowledge. It is believed that a beginning in this direction has already been observed, and that there exists a widespread conviction that such a course is required by sound doctrine. Certain western institutions have laid emphasis upon this point for several years. It is gratifying to note that the recognition of this principle is gaining ground in the New England colleges. The principle involved is one essential to the best interests of secondary education, and unless this principle is adopted unreservedly, secondary training will not only lose a large share of its value, but in many cases prove distinctly injurious.

The tendency toward the introduction of elective work in secondary schools has unquestionably increased during this past year. In so far as such election is virtually an arrangement of studies in groups of closely connected subjects, no exception to it may be taken; but to the proposition that the average secondary student is able, even with the parents' help, to select his subjects, and that such selection, because it is an election on his part, is preferable to the grouping of subjects which the best experience has approved, the writer desires to enter earnest protest—a protest based upon experience with students of a still maturer age. It has been my experience, after careful study of the facts as brought to light in the operation of different systems, that the average boy or girl in the freshman or sophomore college years exhibits an utter inability to make wise decision between various courses of instruction. The choice will be determined, in a majority of instances, by the hour of recitation, or some statement concerning the course by a fellow-student. Least of all does he have in mind the relationship of the course to the work which lies before him. I am, therefore, strongly of the opinion that, unless the choice of subject in secondary work is practically controlled by the principal, election will prove injurious rather than helpful. Much is said, in connection with the open elective system, both in secondary school and college, of the advice given by instructors and the assistance rendered by parents, but practical experience goes to show that no one is more easily influenced by whims than the parents, and that too frequently the instructor is a specialist who has little interest in or knowledge of subjects outside of those with which he himself is directly connected.

The rapidly growing demand on the part of high schools and academies for teachers of athletics, manual training, and domestic science is significant of important educational tendencies, and the demand is no less significant than the fact that at the present time teachers in these specialties are so few that the demand cannot be met. It is no longer possible for a teacher of Latin or a teacher of mathematics to perform service in these new departments. Not only is the amount of work called for too great, but the training required is of so special a character that a teacher is not fitted to perform the work who has not received special instruction. It would be well for the cause of secondary education if some of those teachers who today are preparing themselves for the teaching of English or Latin or mathematics were to consider whether they might not be more certain of a strong position if their special training should be made in one of these more practical subjects.

An interesting feature of the year that has closed has been the not infrequent announcement of the appointment in secondary schools of a man or woman holding the degree of doctor of philosophy. The number of high-school teachers having the full college training has been greatly increased during the year, at least in western schools. There is, to be sure, some danger that the newly fledged doctor of philosophy will have become so great a specialist as to be unfitted to teach the elementary courses required in the high school. But this is by no means so true of the doctor of philosophy trained in an American institution as of the doctor of philosophy trained in a foreign university. American universities, while laying equal stress upon research, do not fail to keep before the mind of the candidate for the doctorate the practical side of life and teaching; and it will mark a splendid point of realization in the history of secondary work when a proportion, at least, of the teachers in any secondary school shall be doctors. Side by side with this point is that very closely related demand which calls for special pedagogical training of college graduates who desire to become high-school teachers. It appears, on the one hand, that the average secondary teacher shows a remarkable lack of broad liberal knowledge. Men, as a matter of fact, go thru our American colleges without securing accurate knowledge in any subject which they study, and the close of their college course finds them in possession of no really solid mass of facts to build upon. It is maintained by some of our secondary-school leaders — for example, Dr. Julius Sachs, of the Collegiate Institute in New York city — that this statement holds good of work in the classics as well as in subjects like history and modern languages. It is the testimony of the teachers in the normal schools and teachers' colleges that they are unable to take up the discussion of methods of teaching in secondary subjects because they find themselves immediately confronted with the necessity of teaching the subject-matter. This difficulty, I maintain, will never be adequately met until those who plan for themselves a career in secondary teaching have done that work in a particular department which is now ordinarily done for a doctor's degree. On the other hand, it is equally true that many teachers are found to possess the necessary scholarship, who lack the knowledge of pedagogical principles that is needed for the simplest kind of instruction. The best teachers, in my experience, are often those who at first show no special ability for teaching, but have given themselves to the study of the principles of teaching and have overcome difficulties that at first seemed insuperable. In both directions, therefore, the movement forward is encouraging.

A remarkable fact in connection with secondary schools is their phenomenal growth. I do not stop to present the statistics, for these have been indicated on more than one previous occasion. If it is true that the number of high-school students has doubled within the last decade; that the great majority of all students who enter college now come from the high schools (it is an interesting fact that even in New England, Dartmouth College should receive from high schools more than a hundred of the hundred and forty-one members of its present junior class); that the number of high schools is increasing rapidly in every state; and that the scope of their curricula is growing almost at a pace with the increase in numbers, the time has surely come when this factor in our educational machinery deserves greater consideration that it has hitherto received. Wedged in between the great common-school work and the higher work of colleges and universities, its prominence in the past has not been commensurate with its importance. The high-school curriculum cannot longer be regarded as one to be adjusted as a preparation for college. It may be questioned whether preparation for college is the most important subdivision of high-school work. In any case, these schools have come to occupy a unique field independent of higher institutions. In many sections of the country the work is co-ordinate with the work of the smaller colleges, and the preparatory schools connected with the smaller colleges no longer occupy their former place of importance and dignity. In fact, the high school is rapidly coming to be a rival of the smaller college itself. In some states the high school now does the work of the freshman year, and even some of the work of the sophomore year, this being recognized and accepted by the state universities. This tendency, while subversive of the relationships which have hitherto existed between college and preparatory school, and while injurious in the extreme to the growth and development of the smaller college, is a tendency which is invaluable and which deserves encouragement. It is a movement in the interests of economy, of better secondary education, and of better and broader higher education. The time is coming when, in every state, the leading high schools will carry the work to the end of the sophomore year in college. Nothing can be said in justification of the policy of stopping at an earlier point than this.

If, as has been suggested, the most significant step in the field of secondary education in the eastern states has been the successful inauguration of the College Entrance Board, it is perhaps true that the most significant step in the West has been the establishment of the North Central Association of Colleges and Secondary Schools, of its commission on accredited schools. This commission was established in 1901, and made its first report at the annual meeting held in Cleveland, March 28,

1902. The commission consists of about forty members, equally divided between colleges and secondary schools. Its purpose is to effect reasonable uniformity in requirements for admission to college. If the plan recommended is put into operation, any student graduated from any school on the accredited list may without difficulty enter any college in the association.

The report defines a unit course of study as a course covering a school year with four or five periods of at least forty-five minutes each per week. It is recommended that the high-school curriculum contain not less than fifteen such units, and that the same number be accepted as fulfilling the requirements for admission to college. Of these fifteen units, there shall always be three in English and two in mathematics.

The report also presents:

1. Definitions with detailed suggestions as to the ground to be covered in each unit of the several subjects of the high-school curriculum.
2. A plan of school inspection in accordance with which the list of accredited schools may be formed.
3. Suggestions for the assignment of college credit for high-school work done in advance of the college-entrance requirements.

In defining and describing unit courses of study the commission has based its recommendations on the definitions of the College Entrance Examination Board of the Middle States and Maryland, the Committee of Twelve of the American Philological Association, the Committee of Twelve of the Modern Language Association, the Committee of Seven of the American Historical Association, and the Department of Science of the National Educational Association.

I wish to join with the distinguished educator of the state of Michigan, Mr. A. S. Whitney, in the following statement:

> I believe that this movement of the North Central Association defining units of study and the way in which these should be pursued, together with the simplification and unification of high-school inspection by the various universities and colleges, will prove the most important uplift given the high schools for many a day. It will furnish something tangible, systematic, and scientific which will form a guide for all schoolmen to follow.

I cannot conclude my statement concerning the secondary schools without mentioning the change which has been decided upon during the present year in the plans of the Chicago Manual Training School, an institution which has influenced secondary education in the West perhaps more than any other scholastic institution in the Mississippi valley. By the terms agreed upon, the institution will be associated with the new School of Education in the University of Chicago. Special buildings for the prosecution of its work on a larger scale are being erected. Its work will remain a distinct and separate work, altho associated in the closest possible manner with the other secondary work of the School of Education. The trustees of the school believe that the time has come for it to enter upon a higher function than that which it has hitherto enjoyed, namely, that of training teachers for special departments of manual-training work. The educational world recognizes the valuable service which Mr. Belfield has performed in the cause of manual training, and stands ready to award him the credit which is his in view of the pioneer service he has rendered.

My last point is to call attention to the lack of interest in the work of the academy as distinguished from that of the high school. The strongest supporter of the high schools believes as cordially as ever in the necessity of the academy. The high school cannot, in the nature of the case, be a boarding school. The need of boarding schools for boys and boarding schools for girls is everywhere acknowledged, but such schools cannot be made strong and effective so long as they are dependent on the funds for their support. In the great flood of benevolence which now flows toward colleges and universities, men and women are forgetting the necessity of strongly endowed academies. I cannot here enter upon an argument in behalf of the academy, but it is safe to say that, just as there is a place for the state university and for the university established by private munificence, so there is a place for the academy as well as for the high school supported by the city.

No one can doubt that the onward movement of secondary education during the past year has been as great as that of any preceding year in the decade.

Every succeeding year of the past decade has witnessed a greater interest on the part of the American people at large in the work of *higher education*. The year just passing has contributed as much, perhaps, as any two or three of the preceding years. This larger interest is manifested by the increased attendance at all institutions giving instruction in higher work, by the greater numbers of men and women preparing themselves for the work of instruction in higher institutions, and by the larger public generosity which is manifesting itself on every possible occasion. In each of these particulars the advance during the past year has been significant. Many of our institutions are actually overcrowded, the numbers being greater than can be adequately cared for. The number of graduate students in our universities has more than doubled in five years. It is from this source that men and women are being selected to fill the chairs of our colleges and universities. Every week, and in some weeks every day, the public press announces gifts for higher education of $50,000, $100,000, and larger sums. The federal government appropriates in one bill $6,500,000 for the Military Academy at West Point; in another bill, even a larger sum for the Naval Academy at Annapolis. This increase in the numbers of students and in the numbers of those preparing for professorial work is not limited to any one section of the country. It reaches from the East to the far West. Nor are the gifts for education limited to the East, to the central states, or to the West. They are being poured out lavishly in every direction, and are given alike to the smaller institutions and to the large universities.

An important feature of higher educational work in most recent times is the attention which is being given to commercial and technical instruction. The time has come when the university is compelled to adjust itself more definitely to its environment. The prevailing characteristic of the modern environment is now included under these words: commercial and technological. In spite of the fact that in Boston there exists the greatest technical school in America (the Massachusetts Institute of Technology), Harvard University is compelled, so says its president, to establish by the side of it another school of technology. This is necessary in part because students who wish to attend school at Harvard desire instruction in technology, and also because a university must serve as the true expression of the sentiment of its period. The state universities have naturally led the way in the development of technological work. Other universities must follow if they are to meet the demands of the times. It still remains to be seen whether the steps that have been taken in the direction of commercial education of a college grade will realize the hopes of those who have engaged in it. After all, it is to be remembered that the main purpose of a college course is not the information which the student gains; and yet it is to be conceded that any ordinary subject, well studied, may be used advantageously for the purposes of general education.

A strong movement seems to have set in in the direction of reducing the number of bachelor's degrees to one. Following the lead of Harvard University, several institutions, including Columbia and Cornell, have given up the degrees of bachelor of science and bachelor of philosophy, and bestow upon all students who finish the college course the degree of bachelor of arts. This policy can, at all events, be defended on the ground of simplicity. It does away with distinctions which may seem to have lost their force. The strongest argument that has been urged is that by concentrating effort in the preservation of this degree the college course will be saved, where otherwise it is in danger of being lost. It may be questioned whether this tendency will go much farther. It is surely doubtful whether it is to become universal. There are those who believe that the distinctions proposed in the different degrees are distinctions based upon real differences; that a course the larger part of which is in science may properly be called a course in science, and the degree given be a degree in science. The word "science" is one which its enthusiastic advocates should honor by use rather than dishonor by rejection. By the side of the old college of arts, the characteristic feature of which was the study of the classics, there have grown up two sister-colleges: that of science, and that of modern history and literature. Surely this fact may well be recognized ; and nothing is gained by adapting the old degree to the new college, when it is so easy to employ a degree the name of which explains itself. This step can hardly be regarded as a forward step in education. The breaking down of real distinctions means backward movement, not progress.

It is generally conceded that the instruction given to students in the earlier college years has greatly improved within a short period. The custom of appointing as tutors or instructors students who had just graduated from college has almost disappeared in the better class of institutions. It is now expected that an instructor shall have had at least three years of special training in the subject in which he is appointed to give instruction. In some institutions there must be added to this at least one or two years of class-room instruction before an appointment is made. Not long since it was a common complaint that students in their freshman year received poorer instruction than in the last years of the academy or high school; and there was ground for this complaint. It can no longer be made, however, in view of the men appointed in all our institutions to do the earlier college work. In many institutions the oldest and most experienced professors give a portion of their time to freshman and sophomore classes.

A recent discussion in the *Century Magazine*, on the growth of luxury in student life, seems to have shown that, in so far as there has been a growth in this particular, it has not exceeded the similar growth in ordinary American life. Student life in our colleges and universities differs very slightly from the life of young men and women in any other sphere. Nowhere is life more democratic. It is impossible in student life that the influence of wealth should be felt. In most institutions the man who earns his livelihood by waiting on table occupies as high a position in the estimation of his fellows, if he is himself worthy of it, as does the man whose father is worth millions. The passing year has furnished no evidence that our higher institutions are moving farther away from the people. The fact that entering classes have been larger than ever indicates a confidence on the part of the American public in the purposes of the college and a faith in its ability to work out these purposes.

The much-discussed subject of college athletics has received no important contributions during the year. Three things may perhaps be noted: first, the more stringent rules adopted by the western colleges for the regulation of intercollegiate athletic work, and the general opinion that western college athlethics are now practically free from professionalism ; second, the policy of many institutions to organize games between different divisions of the university itself, as well as to develop a special team for intercollegiate or inter-university work ; third, a growing feeling that the charging of large fees for admission to games savors too much of professionalism.

It may be feared that within a comparatively short time the rivalry between closely located institutions east and west has developed some antagonism. In not a few institutions there seems to exist a strong spirit of personal hostility toward other institutions with which competition in athletics is undertaken. Some of this same spirit has been manifested by home teams toward visiting teams, as well as by visiting teams toward the teams on whose grounds the games have been played. It is hardly necessary to say that such manifestations are a mark of deterioration and indicate that instead of making progress we are losing ground. Such an attitude of mind is hardly worthy of a true sportsman; much less does it accord with the high academic spirit. If such feelings are a necessary part of intercollegiate athletics, the sooner intercollegiate athletics are abandoned the better for all concerned. One cannot believe, however, that these manifestations are anything more than passing phases, which, in another year, will have been forgotten, and that in their place there will arise a stronger spirit of dignified and friendly rivalry, characteristic at once of the gentleman and the scholar.

The head of a prominent state university in the West has written to me that, in his opinion, one of the leading features of the educational advance of the year "is the measure of fraternal regard which has grown up between leading institutions of higher learning. If this existed before, it has certainly had a marked advance in the course of the last twelve months, and it is a very important factor in the future of American education." No one can doubt the truth of this statement, made by President Draper of the University of Illinois. It is not too much to say that nowhere in the various activities of the world has fraternal regard shown itself more distinctly, nowhere has the spirit of co-operation been manifested more definitely, than among the higher institutions of learning. A conspicuous example of the good feeling existing between institutions is the interchange of professors which has grown up during these last years, the trustees of one university consenting to the transfer, for a certain period, of a particular person to another institution. A most striking case of this kind is the arrangement by which the corporation of Harvard University has recently given leave of absence to a professor in its law school, with the understanding that he shall accept for that period the deanship of the new law school of the University of Chicago, and undertake to establish, in connection with the latter university, a school which shall, at all events in some measure, partake of the strength and characteristics of the Harvard school. What greater evidence of good-will and mutual interest could be presented? This spirit of fraternal regard has been shown most tangibly in the four great academic festivals of the year, held in connection with the celebration of the Yale bicentennial, the celebration of the twenty-fifth anniversary of the Johns Hopkins University, the inauguration of President Butler at Columbia, and the centennial celebration of the Military Academy at West Point. At each of these celebrations representatives of many institutions were assembled. It seemed to be the prevailing opinion that good relationships between institutions of higher learning are not only conserved, but greatly encouraged, by such gatherings. In any case, it is evident that, so far as the faculties are concerned, old hostilities have disappeared. In spite of the sharp competition which necessarily exists, feelings of the most friendly character are entertained, officially and unofficially, by one institution for another. It is evident to all that such gatherings are the means by which higher education makes a most forceful impression upon the consciousness of the people of the United States. The country knows no kind of celebration more brilliant or more effective than that which is connected with the two-hundredth anniversary of a university, or even with the twenty-fifth anniversary of an institution of higher learning; and the time has come when the inauguration of the president of a large university is of greater importance and attracts more general interest than the inauguration of the governor of a commonwealth.

The president of Harvard University has called my attention to a change which, as he puts it,

> has been strikingly illustrated during the year now almost finished in the altered taste of benefactors in regard to objects of endowment. The older endowments of Harvard College were for mathematics, divinity, Greek, Latin, moral philosophy, and *belles-lettres*. The subjects which most easily enlist the interest of benefactors now seem to be medicine, architecture, history, economics, and government. Intelligent benefactors are generally moved by some far-reaching hope for good. This change indicates that the hopes of our generation concerning the future progress of civilized man are somewhat different from those during the earlier part of the eighteenth and nineteenth centuries.

The experience of Harvard is the experience of many universities, and no year has furnished more evidence of this change in the attitude of benefactors than the year just closed.

In certain quarters much enthusiasm has been exhibited over the proposition to limit admission to professional schools to those who have already taken the bachelor's degree. The most conspicuous examples of this policy are the Johns Hopkins School of Medicine and the Harvard Law School. During the year the Columbia Law School and the Harvard School of Medicine have adopted the policy. Within two weeks the President of Yale University has expressed in no uncertain way his opinion that "this movement is a movement in the wrong direction." In this opinion I am compelled to join; and, if all the facts were announced, I am persuaded in my own mind that a large proportion of the membership of the very faculties thru which this change has been brought about would agree substantially with Mr. Hadley's point of view. Men who are to do work that shall count in their professions must find themselves in possession of the technique of the profession before they have reached an age when such technique is impossible. Besides this, the earlier courses in law, in medicine, in divinity, are as truly disciplinary and as productive of culture as any subjects that are offered in the college curriculum. Many men who are preparing for a profession are distinctly injured by the last year or two in college, instead of being benefited thereby. There are some men for whom the college atmosphere, as distinguished from that of the professional school, is not a wholesome one. Men who in college idle away their time in many cases find the more strenuous life of professional training exactly suited to their needs. The value of this movement, both from the point of view of the college and from that of the professional school, may, therefore, be doubted. In any case, a middle ground, requiring two or three years of college work, is a superior policy for the next decade.

The feeling grows stronger in every quarter that the college course, at least for those who are to engage in a profession, must be shortened. It does not seem that the Harvard plan of three years meets with general favor, even in Cambridge, altho, according to the official report, 40 per cent. of the men now graduating from Harvard College finish their academic work within three years. It would seem to be a better plan to allow those who do not contemplate a professional course of study to take the full four years of work in college, and to arrange for the other class to count their early professional work as a part of the work accepted for the bachelor's degree. A great forward step in the direction of this policy has been taken in the recent action of Yale. This policy has been adopted as the basis for the organization of the schools of medicine and law in the University of Chicago. It is the most practicable solution of the problem which confronts us, and bids fair to be the commonly accepted solution within a short time.

Considerable comment has been made, altho in a quiet and cautious way, upon the apparent scarcity of women possessed of the proper qualifications and training for the highest positions in college work. A prominent educator (I think it best to withhold mention of his name) has gone so far as to say that this scarcity is greater today than it was five years ago. Several suggestions have been made in explanation of the fact. For myself, I am not convinced that the proposition itself is true. The women now being graduated, with the doctor's degree, from our strongest institutions, are, in almost every particular, as able and as strong as the men. If opportunity were offered, these women would show that they possess the qualifications demanded. The fact is that to women there do not come the opportunities to show their strength which come to men. In colleges and universities for men only, women may not find a place upon the faculty. In a certain great state university, in which there are as many women students as men students, women are represented in the faculty by a single individual, and she has been appointed within the last three years. In some of the women's colleges women find a place. In others, second-rate and third-rate men are preferred to women of first-rate ability. The number of faculties of colleges and universities on which women have appointments in any number is very small, and even in certain institutions in which women have gained secure footing there is often greater or less distress among the men of the various departments if even one or two women are appointed. And yet, is it possible that the heads of our state institutions — institutions which are established by the people and conducted with the people's money; institutions which are professedly democratic beyond all others — deliberately refuse to recommend the appointment of women even when they have attained equal rank with men in scholarship and efficiency? So far as I can ascertain, during the past year the appointments of women, east and west, even in coeducational institutions, have numbered very few; fewer, perhaps, than ever before. Is this progress? Or is it rather a concession to prejudices which, instead of growing weaker, are growing stronger? I venture to ask the regents of our state universities and the trustees of our coeducational institutions to consider this question; and I think it not inappropriate to suggest for the consideration of the trustees of certain women's colleges the question whether, in this matter, they have given to women the full opportunity which they deserve.

A burning question during this past year has been that which relates to the tenure of office of professors. That words have been spoken on both sides of the question is evident from the following statements, taken from personal letters addressed to me by two eminent presidents of universities. One of these gentlemen writes as follows:

> Another tendency characteristic of the passing year, and tending toward reform, is the growing feeling that the professor's chair is sacred only as its incumbent makes it so, and that it is the right and duty of a university not to retain men deficient in character or ability as judged by the reasonable standards of the institution itself.

Another equally prominent president writes from the other point of view:

> I can think of nothing so important to be touched upon in such a review as that which you propose as the danger of professorial degradation. This danger is mainly twofold: one arising from the extremely low salaries many institutions of considerable character are paying to titular professors, who, in the nature of the case, must be most ill-furnished for the work; and, secondly, from the tendency in certain quarters to snub professors, to treat them as underlings, and to constitute the head of the university a mere business boss. It is not at all the issue of academic freedom in the old sense, but rather one of personal freedom, manliness, and self-respect on the part of professors. I deem this a real danger vastly greater than any in which academic freedom, in the old sense, has ever stood in this country.

Here, then, is the issue; and it is an issue squarely drawn. Has progress been made in this respect, or has ground been lost in these last months? I have no hesitation in finding an answer to this question. Every month of the last twelve months has added to the security and permanence of the professor in the prosecution of his work. Every month has added to his dignity and to the importance which attaches to his words. Every month has made it clearer that public sentiment is on the side of the professor in any contest entered into with the institution of which he is a member. Within five years the sentiment has become almost universal that, once a man is appointed to do work in a university, the university is responsible for the appointment, but not for the views which the man later may propound. Gradually, but surely, even the common people are coming to perceive the difference between the university and the individual professors who form its staff. The time has not yet come, to be sure, when the people make distinctions of this same kind between the president of an institution and the institution itself. It is still wrongly understood that the words of a president must be words carrying with them the force and influence and authority of the university as a whole. Ten years from now, in the West and Northwest, men will be able to make this additional distinction. But great has been the progress which has thus far obtained in the attitude of the public toward the individual professor. It is asked, however, and not without reason: "Is there no limit to the indiscretion which a professor may commit in language or in deed? Are there no circumstances under which, by common consent of all concerned, the resignation of a professor may wisely and justly be demanded?" I take the liberty of repeating on this occasion words which I have used within the year in another address:

The greatest single element necessary for the cultivation of the academic spirit is the feeling of security from interference. It is only those who have this feeling that are able to do work which in the highest sense will be beneficial to humanity. Freedom of expression must be given the members of a university faculty, even tho it be abused; for, as has been said, the abuse of it is not so great an evil as the restriction of such liberty. But, it may be asked, in what way may the professor abuse his privilege of freedom of expression? or, to put the question more largely, in what way does a professor bring reproach and injury to himself and to his institution? I answer: A professor is guilty of an abuse of his privilege who promulgates as truth ideas or opinions which have not been tested scientifically by his colleagues in the same department of research or investigation. A professor has no right to proclaim to the public as truth discovered that which is yet unsettled and uncertain. A professor abuses his privilege who takes advantage of a class-room exercise to propagate the partisan views of one or another of the political parties. The university is no place for partisanship. From the teacher's desk should emanate the discussion of principles, the judicial statements of arguments from various points of view, and not the one-sided representations of a partisan character. A professor abuses his privilege who in any way seeks to influence his pupils or the public by sensational methods. A professor abuses his privilege of expression of opinion when, altho a student and perhaps an authority in one department or group of departments, he undertakes to speak authoritatively on subjects which have no relationship to the department in which he was appointed to give instruction. A professor abuses his privilege in many cases when, altho shut off in large measure from the world, and engaged within a narrow field of investigation, he undertakes to instruct his colleagues or the public concerning matters in the world at large in connection with which he has had little or no experience. A professor abuses his privilege of freedom of expression of opinion when he fails to exercise that quality—which, it must be confessed, in some cases the professor lacks—ordinarily called common-sense. A professor ought not to make such an exhibition of his weakness, or to make an exhibition of his weakness so many times, that the attention of the public at large is called to the fact. In this respect he has no larger liberty than other men.

But may a professor do all of these things and yet remain an officer in the university? Yes. The professor in most cases is only an ordinary man. Perfection is not to be expected of him. Like men in other professions, professors have their weaknesses. But will a professor under any circumstances be asked to withdraw from the university? Yes. His resignation will be demanded, and will be accepted, when, in the opinion of those in authority, he has been guilty of immorality, or when for any reason he has proved himself to be incompetent to perform the service called for. The public should be on its guard in two particulars: the utterance of a professor, however wise or foolish, is not the utterance of the university. No individual, no group of individuals, can speak for the university. A statement, by whomsoever made, is the statement of an individual.

President Jordan of the Leland Stanford Junior University has suggested to me that among the various important movements of the year is the disposition of small colleges to become junior colleges, turning their graduates over to the universities at the beginning of the junior year. I may not dwell upon this opinion longer than to say that, within my own observation, many facts pointing in this direction have occurred. When some of our smaller colleges shall have come to appreciate the fact that their position in the educational world will, indeed, become a higher one if they will limit their work to that which they can do with thoroness and satisfaction to all concerned, and will encourage their students at the end of the sophomore year to take advantage of the larger foundations to be found in the state universities and in the great cities of the country, a great step forward will have been taken. The adoption of this policy by even a few will inaugurate a movement the ultimate results of which will be of incalculable value to the cause of higher education.

No fact has been commented on more widely than that which has been thoroly illustrated by the change of presidency at Princeton; namely, the transfer of the control of education from the clergy to the laity. In the Association of American Universities only one institution is under the administration of a clergyman; that one is the Roman Catholic University at Washington, and is essentially a theological institution. Special attention was drawn to this fact in the address of Mr. Eliot at the Columbia celebration. The significance of it is self-evident, and, when coupled with the fact that so small a number of college graduates in our universities now plan for the profession of preaching, the significance grows even more startling. Moreover, from no quarter, not even from the clergy, do we find criticism of this policy. It seems to meet with general favor and approval. Surely, if anywhere, the old régime would have continued in Princeton; but even at Princeton the new policy has been adopted. The fact is itself a commentary upon the function and place of higher education in the public mind. It is an epitome of the great change which has taken place within so short a time. One may not be too sure that this change is altogether good. Time alone will determine whether something is not lost in this transfer. It does not mean that our institutions of learning are any less religious either in fact or in theory, for it may be confidently maintained that never, in the history of higher education, has the religious spirit prevailed more widely, or extended more deeply, than at present. It does not mean that questions of ethics or of philosophy occupy a less prominent place than in former years. It does not mean that biblical instruction is now taking a secondary place in comparison with that which it has hitherto occupied; for here again, as everyone knows, never before in the history of college education have biblical studies occupied the place in academic instruction which they hold today. But if it does not mean these things, what does it mean? Simply that the work of education is itself a profession, separate and distinct from preaching. Just as, in olden time, when specialism introduced itself, he who had formerly been sage and soothsayer and priest was compelled to specialize, and three different classes of teachers, under different names, arose to do the work, namely, the sage, the prophet, and the priest; so today the training of the preacher is not the training which ordinarily is best adapted to prepare a man for the work of a university presidency. In truth, the position of the university president has become a unique position, a profession by itself; one the demands of which are greater perhaps than those made upon any other profession. This new phase is a growth of the last two decades. What its future development will be no one can prophesy; but it stands out today as distinct from the office of the clergy, on the one hand, as from that of the specialist in any department of science, on the other. The college president must be a specialist, and he must also be a generalist.

Scholarship is expected of him; at the same time, thoro business training. The capacity for desk work is demanded, and, besides, skill in public speaking; and, above all, if not knowledge of all things, at least sympathy with all knowledge. The past year has made large contribution to the further differentiation of this new character in modern life.

The two greatest single events in the history of higher education during the past year—indeed, during the past ten years—are those connected with Mr. Rhodes' proposition for American and colonial scholarships at Oxford and the foundation of the Carnegie Institution in Washington for research work. It is intensely interesting to note that these two great events were announced within ninety days of each other, and that the one is distinctly for educational purposes, the other for purposes of research, the two thus covering the entire function of the modern university. It is interesting to note further that in one case the provision is made by a foreigner, altho intended to benefit American youth, and that in the other case the provision is also made by a man of foreign birth, its purpose being to elevate and dignify and increase the possibilities of research work in the land of his adoption. The members of the National Educational Council cannot fail to have noted that the action of Mr. Carnegie was the direct result of a report made by a committee of this Council a year ago, and that the Carnegie Institution has been established on precisely the lines laid down in the report of this Council's committee.

The president of one of our oldest institutions writes to me privately this statement concerning these great gifts: "The relation of the great gifts of the past year to the future, like those of Carnegie or Rhodes, is so problematical that I do not, so early as this, venture to estimate their importance."

It is plainly possible that great injury to the cause of education may result from gifts of this magnitude, unless they are properly administered. On the basis of important testimony, coming to me directly from leaders of education in Scotland, I am convinced that Mr. Carnegie's gift to Scotch universities up to the present time has resulted in far greater injury than good to those institutions and to the cause of education in that country. One of the most dangerous weapons in the world is a large sum of money badly administered in a good cause. It is, therefore, as has been suggested, too early to hazard an opinion on the good or evil results of these gifts. That both of them have great possibilities of good no one can deny. The Carnegie fund has been established for research and ought to contribute largely to institutional co-operation; but if, instead of encouraging the work of research and investigation as already established in our institutions of learning, it endeavors to detach such work from those institutions and to gather to itself the responsibility and the credit for such work; if, instead of strengthening the work where it already exists, it undertakes to establish new foundations, independent of these institutions, in order that its own work may be more tangible, it will prove to be the greatest curse to higher education in this country instead of a blessing. If the Rhodes scholarships are to be employed to detach from the American environment one hundred or more young men of special ability each year and transport them to foreign soil in order to imbue them with foreign ideas at an age when they are peculiarly impressionable; if the purpose of this foundation is to draw all men to a recognition of the doctrine of imperialism as it is embodied in the British Empire, the execution of this trust may prove a curse instead of a blessing to those who avail themselves of its privileges.

But there is no good reason to suppose that these injurious results will follow. The men to whose trust has been committed the Carnegie Institution are men of broad sympathies and of large ideas. Altho, thus far, no sufficient indication has been given of the policy of the institution to lead us to suppose that the original proposition of institutional co-operation has a large place in the minds of those immediately in control, time will convince all who have relationship to this institution that only such a policy will be productive of the best results. And, surely, in the disposition of the Rhodes scholarships there will be employed that same large wisdom which has thus far characterized British statesmanship and diplomacy. The form of the gift is sufficiently indefinite to make it possible to modify the original proposition and to permit these scholarships to be for graduate work rather than for undergraduate work. In any case, regulations may easily be established which will make profitable this temporary sojourn of American youth in a country so closely connected with our history and our sympathies. England and America stand together today, and in the future will continue to stand together, in all great international and humanitarian movements; and this additional bond of union may be not the least important one in bringing about great international reforms, in which England and the United States shall take the lead.

We who are workers in the educational field today live in a period of great and wide-reaching opportunity. Our predecessors knew nothing of the advantages which we enjoy. The outlook which presents itself to us would have been for them an utterly impossible one. Greater wisdom is needed today, in view of these new and splendid opportunities. The work of the teacher grows more and more secure, and is more and more highly esteemed by the people at large. It is the highest career man or woman is permitted to follow. The greatest of all men was a teacher, a man who employed the methods of a teacher, and was recognized as such by all who met him. In view of the achievements of the past, and the possibilities and opportunities of the future, let us "gird our loins," put on new strength, and take up the burden of life for another year with new courage and with a never-failing faith in the dignity and value of the work which God has given us to do.

To the more than one hundred leaders in education in the elementary, the secondary, and the higher fields of work who, by their suggestions, have aided me in the preparation of this paper, I wish to make acknowledgment of my indebtedness.

I have intentionally omitted the consideration of the educational literature of the year, as well as the trend of educational matters across the ocean. It was necessary to place some kind of limitation on the scope of the paper.

THE SCHOOL AS SOCIAL CENTER

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According to the character of my invitation to speak to you, I shall confine myself to the philosophy of the school as a social center. I accept the invitation with pleasure, but at the same time I do not feel that the philosophical aspect of the matter is the urgent or important one. The pressing thing, the significant thing, is really to make the school a social center; that is a matter of practice, not of theory. Just what to do in order to make the schoolhouse a center of full and adequate social service, to bring it completely into the current of social life — such are the matters I am sure which really deserve the attention of the public and that occupy your own minds.

It is possible, however, and conceivably useful to ask ourselves: What is the meaning of the popular demand in this direction? Why should the community in general, and those particularly interested in education in especial, be so unusually sensitive at just this period to this need? Why should the lack be more felt now than a generation ago? What forces are stirring that awaken such speedy and favorable response to the notion that the school as a place of instruction for children is not performing its full function — that it needs also to operate as a center of life for all ages and classes?

A brief historic retrospect will put before us the background of the present situation. The function of education, since anything which might pass by that name was found among savage tribes, has been social. The particular organ or structure, however, thru which this aim was subserved, and the nature of its adjustment to other social institutions, has varied according to the peculiar condition of the given time. The general principle of evolution, development from the undifferentiated toward the formation of distinct organs on the principle of division of labor, stands out clearly in a survey of educational history. At the outset there was no school as a separate institution. The educative processes were carried on in the ordinary play of family and community life. As the ends to be reached by education became more numerous and remote, and the means employed more specialized, it was necessary, however, for society to develop a distinct institution. Only in this way could the special needs be adequately attended to. In this way developed the schools carried on by great philosophical organizations of antiquity— the Platonic, Stoic, Epicurean, etc.—then came schools as a phase of the work of the church. Finally, with the increasing separation of church and state, the latter asserted itself as the proper founder and supporter of educational institutions; and the modern type of public, or at least quasi-public, school developed. There are many who regard the transfer of this educational function from the church to the state as more than a matter for regret—they conceive of it as a move which, if persisted in, will result disastrously to the best and permanent interests of mankind. But I take it we are not called upon today to reckon with this class, large and important as it may be. I assume that practically all here are believers in the principle of state education—even if we should not find it entirely easy to justify our faith on logical or philosophical grounds. The reason for referring to this claiming by the state of the education function is to indicate that it was in continuance of the policy of specialization or division of labor.

With the development of the state has come a certain distinction between state and society. As I use these terms, I mean by State the organization of the resources of community life thru governmental machinery of legislation and administration. I mean by Society the less definite and freer play of the forces of the community which goes in the daily intercourse and contact of men in an endless variety of ways that have nothing to do with politics or government or the state in any institutional sense. Now, the control of education by the state inevitably carried with it a certain segregation of the machinery of both school administration and instruction from the freer, more varied, and more flexible modes of social intercourse. So true is this that for a long time the school was occupied exclusively with but one function, the purveying of intellectual material to a certain number of selected minds. Even when the democratic impulse broke into the isolated department of the school, it did not effect a complete reconstruction, but only the addition of another element. This was preparation for citizenship. The meaning of this phrase, preparation for citizenship, shows precisely what I have in mind by the difference between the school as an isolated thing, related to the state alone, and the school as a thoroly socialized affair in contact at all points with the flow of community life. Citizenship, to most minds, means a distinctly political thing. It is defined in terms of relation to the government, not to society in its broader aspects. To be able to vote intelligently, to take such share as might be in the conduct of public legislation and administration—that has been the significance of the term.

Now our community life has suddenly awakened; and in awakening it has found that governmental institutions and affairs represent only a small part of the important purposes and difficult problems of life; and that even that fraction cannot be dealt with adequately except in the light of a wide range of domestic, economic, and scientific considerations quite excluded from the conception of the state, of citizenship. We find that our political problems involve race questions, questions of the assimilation of diverse types of language and custom; we find that most serious political questions grow out of underlying industrial and commercial changes and adjustments; we find that most of our pressing political problems cannot be solved by special measures of legislation or executive activity, but only by the promotion of common sympathies and a common understanding. We find, moreover, that the solution of the difficulties must go back to a more adequate scientific comprehension of the actual facts and relations involved. The isolation between state and society, between the government and the institutions of family, business life, etc., is breaking down. We realize the thin and artificial character of the separation. We begin to see that we are dealing with a complicated interaction of varied and vital forces, only a few of which can be pigeonholed as governmental. The content of the term citizenship is broadening; it is coming to mean all the relationships of all sorts that are involved in membership in a community.

This of itself would tend to develop a sense of something absent in the existing type of education, something defective in the service rendered by the school. Change the image of what constitutes citizenship and you change the image of what is the purpose of the school. Change this, and you change the picture of what the school should be doing and of how it should be doing it. The feeling that the school is not doing all that it should do in simply giving instruction during the day to a certain number of children of different ages, the demand that it shall assume a wider scope of activities having an educative effect upon the adult members of the community has its basis just here: We are feeling everywhere the organic unity of the different modes of social life, and consequently demand that the school shall be related more widely, shall receive from more quarters, and shall give in more directions.

As I have already intimated, the older idea of the school was that its primary concern was with the inculcation of certain facts and truths from the intellectual point of view, and the acquisition of certain forms of skill. When the school became public or common, this notion was broadened to include whatever would make the citizen a more capable and righteous voter and legislator; but it was still thought that this end would be reached along the line of intellectual instruction. To teach children the constitution of the United States, the nature and working of various parts of governmental machinery, from the nation thru the state and the county down to the township and the school district, to teach such things was thought to prepare the pupil for citizenship. And so some fifteen or twenty years ago, when the feeling arose that the schools were not doing all that they should be doing for our life as a whole, this consciousness expressed itself in a demand for a more thoro and extensive teaching of civics. To my mind the demand for the school as a social center bears the same ratio to the situation which confronts us today, as the movement for civics bore to the conditions of half a generation ago. We have awakened to deeper aspects of the question; we have seen that the machinery, of governmental life is after all but a machinery, and depends for its rightness and efficiency upon underlying social and industrial causes. We have lost a good deal of our faith in the efficacy of purely intellectual instruction.

Some four specific developments may be mentioned as having a bearing upon the question of the school as a social center. The first of these is the much increased efficiency and ease of all the agencies that have to do with bringing people into contact with one another. Recent inventions have so multiplied and cheapened the means of transportation, and of the circulation of ideas and news thru books, magazines, and papers that it is no longer physically possible for one nationality, race, class, or sect to be kept apart from others, impervious to their wishes and beliefs. Cheap and rapid long-distance transportation has made America a meeting-place for all the peoples and tongues of the world. The centralization of industry has forced members of classes into the closest association with, and dependence upon, each other. Bigotry, intolerance, or even an unswerving faith in the superiority of one's own religious and political creed are much shaken when individuals are brought face to face with each other, or have the ideas of others continuously and forcibly placed before them. The congestion of our city life is only one aspect of the bringing of people together which modern inventions have induced.

That many dangers result from sudden dislocations of people from the surroundings—physical, industrial, and intellectual—to which they have become adapted; that great instability may accompany this sudden massing of heterogeneous peoples, goes without saying. On the other hand, these very agencies present instrumentalities of which advantage may be taken. The best as well as the worst of modern newspapers is a product. The organized public library with its facilities for reaching all classes of people is an effect. The popular assembly and lyceum is another. No educational system can be regarded as complete until it adopts into itself the various ways in which social and intellectual intercourse may be promoted; and employs them systematically, not only to counteract dangers which these same agencies are bringing with them, but so as to make them positive causes in raising the whole level of life.

Both the demand and the opportunity are increased in our large cities by the commingling of classes and races. It is said that one ward in the city of Chicago has forty different languages represented in it. It is a well-known fact that some of the largest Irish, German, and Bohemian cities in the world are located in America, not in their own countries. The power of the public schools to assimilate different races to our own institutions, thru the education given to the younger generation, is doubtless one of the most remarkable exhibitions of vitality that the world has ever seen. But, after all, it leaves the older generation still untouched; and the assimilation of the younger can hardly be complete or certain as long as the homes of the parents remain comparatively unaffected. Indeed, wise observers in both New York and Chicago have recently sounded a note of alarm. They have called attention to the fact that in some respects the children are too rapidly, I will not say Americanized, but too rapidly de-nationalized. They lose the positive and conservative value of their own native traditions, their own native music, art, and literature. They do not get complete initiation into the customs of their new country, and so are frequently left floating and unstable between the two. They even learn to despise the dress, bearing, habits, language, and beliefs of their parents—many of which have more substance and worth than the superficial putting-on of the newly adopted habits. If I understand aright, one of the chief motives in the development of the new labor museum at Hull House has been to show the younger generation something of the skill and art and historic meaning in the industrial habits of the older generations—modes of spinning, weaving, metal working, etc., discarded in this country because there was no place for them in our industrial system. Many a child has awakened to an appreciation of admirable qualities hitherto unknown in his father or mother for whom he had begun to entertain a contempt. Many an association of local history and past national glory has been awakened to quicken and enrich the life of the family.

In the second place, along with the increasing intercourse and interaction, with all its dangers and opportunities, there has come a relaxation of the bonds of social discipline and control. I suppose none of us would be willing to believe that the movement away from dogmatism and fixed authority was anything but a movement in the right direction. But no one can view the loosening of the power of the older religious and social authorities, without deep concern. We may feel sure that in time independent judgment, with the individual freedom and responsibility that go with it, will more than make good the temporary losses. But meantime there is a temporary loss. Parental authority has much less influence in controlling the conduct of children. Reverence seems to decay on every side, and boisterousness and hoodlumism to increase. Flippancy toward parental and other forms of constituted authority waxes, while obedient orderliness wanes. The domestic ties themselves, as between husband and wife as well as in relation to children, lose something of their permanence and sanctity. The church, with its supernatural sanctions, its means of shaping the daily life of its adherents, finds its grasp slowly slipping away from it. We might as well frankly recognize that many of the old agencies for moralizing mankind, and of keeping them living decent, respectable, and orderly lives, are losing in efficiency — particularly, those agencies which rested for their force upon custom, tradition, and unquestioning acceptance. It is impossible for society to remain purely a passive spectator in the midst of such a scene. It must search for other agencies with which it may repair the loss, and which may produce the results which the former methods are failing to secure. Here, too, it is not enough for society to confine its work to children. However much they may need the disciplinary training of a widened and enlightened education, the older generation needs it also. Besides, time is short — very short for the average child in the average city school. The work is hardly more than begun there, and unless it is largely to go for naught, the community must find methods of supplementing it and carrying it further outside the regular school channels.

In the third place, the intellectual life, facts, and truths of knowledge are much more obviously and intimately connected with all other affairs of life than they ever have been at any previous period in the history of the world. Hence a purely and exclusively intellectual instruction means less than it ever meant before. And, again, the daily occupations and ordinary surroundings of life are much more in need of interpretation than ever they have been before. We might almost say that once there was a time when learning related almost wholly to a world outside and beyond that of the daily concerns of life itself. To study physics, to learn German, to become acquainted with Chinese history, were elegant accomplishments, but more or less useless from the standpoint of daily life. In fact, it is just this sort of idea which the term "culture" still conveys to many minds. When learning was useful it was only to a comparatively small and particularly select class in the community. It was just something that the doctor or lawyer or clergyman needed in his particular calling, but so far away from and above the mass of mankind that it could only awaken their blind and submissive admiration. The recent public lament regarding the degradation of the teacher's calling is, to my mind, just a reminiscence of the time when to know enough to be a teacher was something which of itself set off the individual in a special class by himself. It fails to take account of the changes which have put knowledge in common circulation, and made it possible for every man to be a teacher in some respect unto his neighbor.

Under modern conditions, practically every sphere of learning, whether of social or natural science, may impinge at once, and at any point, upon the conduct of life. German is not a fact, knowledge of which makes a distinction between a man and his fellow, but a mode of social and business intercourse. Physics is no longer natural philosophy—something concerned with remarkable discoveries about important but very remote laws; it is a set of facts which, thru the applications of heat and electricity to our ordinary surroundings, constantly come home to us. Physiology, bacteriology, anatomy concern our individual health and the sanitation of our cities. Their facts are exploited in sensational, if not scientific, ways in the daily newspapers. And so we might go thru the whole schedule of studies, once so foreign and alien, and show how intimately concerned they now are with commonplace life. The simple fact is, that we are living in an age of applied science. It is impossible to escape the influence, direct and indirect, of the applications.

On the other hand, life is getting so specialized, the divisions of labor are carried so far, that nothing explains or interprets itself. The worker in a modern factory who is concerned with a fractional piece of a complex activity, present to him only in a limited series of acts carried on with a distinct portion of a machine, is typical of much in our entire social life. The old worker knew something of his process and business as a whole. If he did not come into personal contact with all of it, the whole was so small and so close to him that he was acquainted with it. He was thus aware of the meaning of the particular part of the work which he himself was doing. He saw and felt it as a vital part of the whole, and his horizon was extended. The situation is now the opposite. Most people are doing particular things of whose exact reasons and relationships they are only dimly aware. The whole is so vast, so complicated, and so technical, that it is next to out of the question to get any direct acquaintanceship with it. Hence we must rely upon instruction; upon interpretations that come to us thru conscious channels. One of the great motives for the flourishing of some of the great technical correspondence schools of the present day is not only the utilitarian desire to profit by preparation for better positions, but an honest eagerness to know something more of the great forces which condition the particular work one is doing, and to get an insight into those broad relations which are so partially, yet tantalizingly, hinted at. The same is true of the growing interest in forms of popular science, which forms a marked portion of the stock in trade of some of the best and most successful of our modern monthly magazines. This same motive added much to the effectiveness of the university extension movement, particularly in England. It creates a particular demand for a certain type of popular illustrated lecture. Unless the lives of a large part of our wage-earners are to be left to their own barren meagerness, the community must see to it by some organized agency that they are instructed in the scientific foundation and social bearings of the things they see about them, and of the activities in which they are themselves engaging.

The fourth point of demand and opportunity is the prolongation, under modern conditions, of continuous instruction. We have heard much of the significance of prolonged infancy in relation to education. It has become almost a part of our pedagogical creed that premature engagement in the serious vocations of life is detrimental to full growth. There is a corollary to this proposition which has not as yet received equal recognition. Only where social occupations are well defined, and of a pretty permanent type, can the period of instruction be cut short at any particular period. It is commonly recognized that a doctor or a lawyer must go on studying all his life if he is to be a successful man in his profession. The reason is obvious enough. Conditions about him are highly unstable; new problems present themselves; new facts obtrude. Previous study of law, no matter how thoro and accurate the study, did not provide for these new situations. Hence the need of continual study. There are still portions of country where the lawyer practically prepares himself before he enters upon his professional career. All he has to do afterward is to perfect himself in certain finer points, and get greater skill in the manipulation of what he already knows. But these are the more backward and unprogressive sections, where change is gradual and infrequent, and so the individual prepared once is prepared always.

Now, what is true of the lawyer and the doctor in the more progressive sections of the country, is true to a certain extent of all sorts and degrees of people. Social, economic, and intellectual conditions are changing at a rate undreamed of in past history. Now, unless the agencies of instruction are kept running more or less parallel with these changes, a considerable body of men is bound to find itself without the training which will enable it to adapt itself to what is going on. It will be left stranded and become a burden for the community to carry. Where progress is continuous and certain, education must be equally certain and continuous. The youth at eighteen may be educated so as to be ready for the conditions which will meet him at nineteen ; but he can hardly be prepared for those which are to confront him when he is forty-five. If he is ready for the latter when they come, it will be because his own education has been keeping pace in the intermediate years. Doubtless conversation, social intercourse, observation, and reflection upon what one sees going on about one, the reading of magazines and books, will do much ; they are important, even if unorganized, methods of continuous education. But they can hardly be expected to do all, and hence they do not relieve the community from the responsibility of providing, thru the school as a center, a continuous education for all classes of whatever age.

The fourfold need, and the fourfold opportunity, which I have hastily sketched, defines to some extent the work of the school as a social center.

It must provide, at least, part of that training which is necessary to keep the individual properly adjusted to a rapidly changing environment. It must interpret to him the intellectual and social meaning of the work in which he is engaged: that is, must reveal its relations to the life and work of the world. It must make up to him ,in part for the decay of dogmatic and fixed methods of social discipline. It must supply him compensation for the loss of reverence and the influence of authority. And, finally, it must provide means for bringing people and their ideas and beliefs together, in such ways as will lessen friction and instability, and introduce deeper sympathy and wider understanding.

In what ways shall the school as a social center perform these various tasks? To answer this question in anything like detail is to pass from my allotted sphere of philosophy into that of practical execution. But it comes within the scope of a theoretical consideration to indicate certain general lines. First, there is mixing people up with each other; bringing them together under wholesome influences, and under conditions which will promote their getting acquainted with the best side of each other. I suppose whenever we are framing our ideals of the school as a social center, what we think of is particularly the better class of social settlements. What we want is to see the school, every public school, doing something of the same sort of work that is now done by a settlement or two scattered at wide distances thru the city. And we all know that the work of such an institution as Hull House has been primarily, not that of conveying intellectual instruction, but of being a social clearing-house. It is a place where ideas and beliefs may be exchanged, not merely in the arena of formal discussion—for argument alone breeds misunderstanding and fixes prejudice—but in ways where ideas are incarnated in human form and clothed with the winning grace of personal life. Classes for study may be numerous, but all are regarded as modes of bringing people together, of doing away with barriers of caste, or class, or race, or type of experience that keep people from real communion with each other.

The function of the school as a social center in promoting social meetings for social purposes, suggests at once another function—provision and direction of reasonable forms of amusement and recreation. The social club, the gymnasium, the amateur theatrical representation, the concert, the stereopticon lecture, these are agencies the force of which social settlements have long known; and which are coming into use wherever anything is doing in the way of making schools social centers. I sometimes think that recreation is the most overlooked and neglected of all ethical forces. Our whole Puritan tradition tends to make us slight this side of life, or even condemn it. But the demand for recreation, for enjoyment just as enjoyment, is one of the strongest and most fundamental things in human nature. To pass it over is to invite it to find its expression in defective and perverted form. The brothel, the saloons, the low dance-house, the gambling den, the trivial, inconsiderate, and demoralizing associations which form themselves on every street corner, are the answer of human nature to the neglect, on the part of supposed moral leaders, of this factor in human nature. I believe that there is no force more likely to count in the general reform of social conditions than the practical recognition that in recreation there is a positive moral influence which it is the duty of the community to take hold of and direct.

In the third place, there ought to be some provision for a sort of continuous social selection of a somewhat specialized type — using "specialized," of course, in a relative sense. Our cities carried on evening schools long before anything was said or heard of the school as a social center. These were intended to give instruction in the rudiments to those who had little or no early opportunities. So far they were and are good. But what I have in mind is something of a more distinctly advanced and selective nature. To refer once more to the working model upon which I am pretty continuously drawing, in the activities of Hull House we find provision made for classes in music, drawing, clay modeling, joinery, metal working, and so on. There is no reason why something in the way of scientific laboratories should not be provided for those who are particularly interested in problems of mechanics or electricity; and so the list might be continued. Now the obvious operation of such modes of instruction is to pick out and attract to itself those individuals who have particular ability in any particular line. There is a vast amount of unutilized talent dormant all about us. Many an individual has capacity within himself of which he is only dimly conscious, because he has never had an opportunity for expressing it. He is not only losing the satisfaction of employment, but society suffers from this wasted capital. The evils of the unearned increment are as nothing beside those of the undiscovered resource. In time, I am confident the community will recognize it as a natural and necessary part of its own duty — quite as much as is now giving instructions to little children — to provide such opportunities for adults as will enable them to discover and carry to some point of fulfillment, the particular capacities that distinguish them.

In conclusion, we may say that the conception of the school as a social center is born of our entire democratic movement. Everywhere we see signs of the growing recognition that the community owes to each one of its members the fullest opportunity for development. Everywhere we see the growing recognition that the community life is defective and distorted excepting as it does thus care for all its constituent parts. This is no longer viewed as a matter of charity, but as a matter of justice —

nay even of something higher and better than justice—a necessary phase of developing and growing life. Men will long dispute about material socialism, about socialism considered as a matter of distribution of the material resources of the community; but there is a socialism regarding which there can be no such dispute--socialism of the intelligence and of the spirit. To extend the range and the fullness of sharing in the intellectual and spiritual resources of the community is the very meaning of the community. Because the older type of education is not fully adequate to this task under changed conditions, we feel its lack and demand that the school shall become a social center. The school as a social center means the active and organized promotion of this socialism of the intangible things of art, science, and other modes of social intercourse.

THE RECENT REACTION IN FRANCE AGAINST ROUSSEAU'S NEGATION OF SOCIETY IN EDUCATION

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In the ten minutes at my disposal I can only touch upon the main points of the movement indicated by my subject, omitting all modifying conditions, all proportion and perspective. I have called it a reaction against Rousseau's anti-social doctrine, for it is only in that light that the present tendency can be fully estimated.

A century and a half have passed since Rousseau electrified Europe with his gospel of individuality. It voiced the protest of millions against a crushing social system and gave direction to their resistance. That resistance culminated in the French Revolution and has found permanent effect in the French republic.

We can easily understand that Rousseau's teachings have profoundly affected primary education, the particular agency by which the new social order in France has built itself up. Many of us have felt the charm of the *Émile*, but we have never felt it as a Frenchman feels it. It flatters his national pride by the sense of a power that has affected all other peoples, and it thrills his national sympathies by the qualities which he adores: precision, lucidity, and extraordinary invention. Rousseau is his world-genius cast in a national type; as such he figures in the French university programs and in the lessons and lectures on pedagogy in all French normal schools.

The ideas advanced in the *Émile* were not, it may be admitted, original with Rousseau; they were ideas widely diffused at the time as vague theories or coldly didactic formulas; Rousseau gave them the power of living personalities.

A single one of these ideas concerns us here, namely the effacement of society in the educating process. In the case of *Émile* the effacement is assisted by an isolation of the pupil after the Robinson Crusoe model, but this artificial condition, impossible for the ordinary child, and not complete even in the imaginary instance, is not essential to the purpose. The effacement or negation of society is really accomplished in the mind of the tutor. It is in his way of regarding the pupil, the natural man as opposed to civilized man, and in his conception of the educating process based upon and motived by this notion.

Now these two elements, a principle and its application, comprise all that is essential in a system. They may be generalized as regulations and applied to collective groups of children or infused into the minds of teachers to generate therein a subtle, potent influence, as is the case with the French teachers.

But how, we may ask, had social influences penetrated French education before Rousseau's day? By social influences we must understand in this connection the various forms which manifest the spiritual ideals of the race: art, or the expression of man's esthetic ideals, history or the record of his institutional ideals, and religion the expression of his moral ideals.

Up to 1789 these were the essential parts of education in France, as elsewhere. The French Revolution, of which Rousseau has been called the forerunner, destroyed them. They appeared no more in the specialized schools that rose on the ruins of the old universities, nor in those peculiar secondary schools, "*les ècoles centrales*," which in 1795 took the place of the ancient colleges. In the new schools no subjects were to be treated except "such as are plainly within the reach of the understanding," and morals were to be taught upon "the sole authority of nature."

This didactic form of stating Rousseau's precepts passed over to the republic of 1870 and became a living force in its primary schools.

The programs elaborated for these schools in 1886 gave, it is true, equal recognition to the threefold nature of man, physical, intellectual, and moral, but under the circumstances the stress of effort went wholly to the intellectual. The directions with respect to this division have the Rousseau stamp. "It is proposed," they say, "to instruct the child in a limited number of subjects, but chosen in such a manner that they will not only assure to him all the practical knowledge of which he has need, but that they shall excite his faculties, form his spirit, cultivate and extend it and constitute a true education. To this end the method of training should be essentially intuitive and practical." In other words, it was education keyed upon the particular interests of the children of the working classes, without regard to those ideal possibilities which they share in common with other children.

Both the temper of the people and political necessities tended to detach the state primary school from social and ethical influences. One bond, indeed, united it firmly to organized society, namely the industrial demands of a thrifty, practical people, but this was an influence in its essence individual or non-social.

The administration of primary education under the French republic has been conducted on two distinct tho not necessarily antagonistic lines, the one political, the other philosophic. The most significant fact in its remarkable history is the sudden convergence of the two upon one purpose, namely, that of shifting the system from the intellectual or rational to the ethical and social basis.

Tho the preparation has been prolonged, and to an extent conscious, the change itself has come like the sudden bloom of springtime. It is not the mere verbiage of official decrees, but a living purpose in the minds of teachers, an impassioned enthusiasm for the social whole conceived as the harmonious accord of intelligent minds animated by moral purposes, an ideal to which even children's minds may respond.

On the spiritual side this change is the outcome of the teachings of M. Marion, the first professor of pedagogy at the Sorbonne; of M. Pecaut, professor of ethics at the higher normal schools, and of M. F. Buisson, who was for twenty years the director of the primary system, and who followed M. Marion at the Sorbonne; on the political side the change is the outcome of government pressure intensified by clerical opposition. Under these influences solidarity has become the watchword in the French state schools, but it is solidarity based upon common standards of right and the sense of inward unity and mutual obligations.

This change of basis in the system was one of the revelations of the Paris Exposition. Of all the awards by which the jurors testified their high appreciation of the French educational exhibit, none carried such satisfaction to the recipients as that of a grand prize for the system of moral instruction. Its authors had worked in the spirit of constructive statesmen and the award was a flattering recognition of their purpose and their success. But this moral instruction carries with it a deepened social consciousness. It is the extreme opposite of Rousseau's isolation, and it calls for a process the reverse of that which his fancy dictated.

In this movement toward national solidarity on the part of the French republic there is a return to the principle of historic unity. This was illustrated in a striking manner by the retrospective exhibits which formed a unique feature of the Paris Exposition. There is also an evident purpose to center in the school the influences that make for social unity; hence the school "patronage societies" or corporations of friends of the school, who work for the social and industrial welfare of the pupils. These societies tend more and more to assimilate with those of associations of former pupils known as *les petites amis.* The latter, which number now about 5,500, have both recreative and economic purposes.

I shall never forget an illustration of their spirit which I saw in a public school for boys in one of the poorest districts of Paris. The director humbly apologized for the shabby building, "the meanest," he said, "in the city." Altho scrupulously clean, it was indeed old, inconvenient, and crowded, but I recall his beaming countenance as we stood in the covered play-court, and he showed me there a little stage fitted up with the essential properties, and furnished with a scenic curtain, all provided by the society of former pupils attached to that school. Here, as he explained, they presented from time to time, for the entertainment of the present pupils and their friends, very fetching French plays or charming concerts.

Above all the schools are the centers of that wonderful propaganda of popular intelligence which seeks to keep alive in the adult masses of France the passion for "the good, the beautiful, and the true."

This work comprises lectures, popular and instructive, courses of lessons in civics or the rights and duties of citizens, in economics applied to the conditions of ordinary life, in industrial science, i. e., agricultural and mechanical, and, for women, lessons in household thrift and arts and in the local industries accessible to them. For the scientific, historic, and literary courses, syllabi are prepared by eminent professors who have the French art of simplifying the difficult. These outlines are freely distributed thruout the country. Teachers, professors, and patriotic citizens are united in maintaining the work. The government gives aid by an annual appropriation and by the loan of lantern slides and other illustrative material. It also rewards the teachers who are most zealous in the cause by a much-coveted prize.

The aim is to make every school a center of civic life, union, and aspiration. This purpose, however, is not suffered to interfere with the regular routine of the school, for in the French system the professional character of the school is most carefully guarded against outside interference and distractions.

In Protestant countries the public primary school has been called the child of the Reformation. In France it almost seems as if the Reformation was to be the child of the public school, for along with this transfer of the school from social isolation to social assimilation is a noticeable revival of religious consciousness in the church. This revival, which in the opinion of impartial observers is drawing the French Catholic church to a sympathetic understanding of the republic, in the Reformed or Protestant church, is apparently working toward a deeper sense of the value of institutional life.

THE COMMON-SCHOOL COMMUNITY

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[AN ABSTRACT]

Viewed comprehensively, and in its last analysis, education is preeminently a religious problem in that it seeks the progressive good of mankind. Religion is here taken in the sense which, Matthew Arnold assures us, best accords with the intention of human thought and language in the use of the word, to-wit: "ethics heightened, enkindled, lit up by feeling."

Generally speaking, the duty of educating a child devolves upon the parents. But the varied and complex relationship of life in the civilization of the present have rendered it impossible for the family to supply an education satisfactory to organized society as represented by the state.

By virtue of its protectory and supervising functions the state exercises the right of holding parents to account for their educational responsibilities. To be sure, with us the state is vitally interested only in the protection of individuals and social groups and their material possessions. With reference to individuals, compulsion of obedience to the two cardinal prohibitive commandments, "Thou shalt not kill" and "Thou shalt not steal," sums up the chief care of the state. But the great law of self-preservation necessarily impels the state to keep its foundations strong and secure. Without this requisite strength and security the state could not possibly retain the power of enforcing compliance with its demands. Recognizing that its own stability is absolutely dependent upon the family, and that the preservation of the family rests wholly upon chastity, the state has added to its original functions the suppression of everything that endangers this foundation of family life.

In the supervision of the education of the people the state directs its attention to three things:

1. That every individual shall acquire respect for law and order and right views of personal liberty.
2. That he shall become self-supporting.
3. That the unity and sacredness of the family be kept inviolate.

These three things, then, represent the minimum requirements the state has a right to look for in the education of the family. Wherever one or the other is disregarded, the state may itself assume the parental prerogative of education.

Now, in order to satisfy these just demands, parents have long since recognized the need of educational co-operation with other parents. Thus there developed the church and the common school.

The kind of educational assistance rendered by the churches does not concern us here. Speaking generally, the church seeks to teach the individual the theologic rationale of the demands made upon him and to cultivate within him the highest motives for helpful co-operation with his fellows. Especially does the church strive to make firm the foundations of family life by preserving, guarding, and promoting chastity and purity. Any church that does not teach the unity of the family and the essentiality of chastity is a menace to society and to the solidarity of the state, and, tho a government be the most democratic that can be conceived, it has a right to suppress that church. Aside from the general supervision here indicated, and which extends to all public associations, the state with us wisely keeps itself free from ecclesiastic entanglements. As a token of recognition of the good work done by the churches toward the preservation of the state, certain tax privileges are accorded them. Therewith the matter justly ends.

For economic reasons, and "that there should be no schism in the body, but that the members should have the same care one for the other," the state cannot recognize the educational work done by the churches, tho it is appreciative of these efforts and does not obstruct them in any way. In this educational policy America is setting an example to the world and is keeping intact the basis for the working out of a system of universal education.

A solution of the problem of child education, most satisfactory to all concerned, has been found in our democracy by the organization of the people of a locality into a community united for the maintenance of a *common* center or school as the sole *common* agency for meeting the educational responsibilities placed upon the several families, but whose conscientious fulfillment is of vital interest to society, and whose sufficiency and efficiency is of fundamental importance to the state.

Now, the co-operative social group bound together for the support of a common school I have for some years designated in my writings and other public utterances as "common-school community," and I am glad to see the gradual adoption of the phrase in general use. Once that term is rightly understood, it will be practically translated into social organization and co-operation wherever Anglo-Saxon principles of democracy prevail, and there will be re-established the "tunship" of old as the most efficient social unit; only its character will be nobler than ever before, united as it is and vivified by eternal, by *educational,* ties for *educational* ends.

Each year brings us nearer to the realization of the school-community ideal; and the principal agency by which society is being put in possession of it is the common school itself. This institution, by the very nature of its origin, suggests and involves co-operation on the part of parents, the one great thing we as teachers ought to preserve and promote by every means within human power. Parents' meetings are as necessary (if not more so) as teachers' conferences. Where parental co-operation is neglected the school, whatever its reputation may be, is lacking vitality. Live parents' meetings tend to develop the social possibilities of the school and to hasten the day of the common-school community. They will gradually transform the school into a general culture center, and will throw its doors open to every rational social purpose in which the townspeople can unite. Lectures, lyceums, art exhibits, concerts, and wholesome entertainments of every kind will be provided. There will be reading rooms for social gatherings, and the charity work of the people will be organized on a sounder co-operative basis than it has ever had before.

But even where the parents are not yet aware of the fact that the school belongs to them and it is their rightful privilege and duty to make the best of its cultural and social potentialities, or where an un-American officialism shuts out parental co-operation, the way is being paved for the school community of the future by the very character and effect of the daily gatherings of children for instruction. The mere coming together of young people from all sorts of homes for purposes of doing things together affords a training in democracy that goes far toward inaugurating the organized school community.

But the common school does more. Its specific purpose is the *social regeneration of the individual* in the service of civilization, patriotism, or good citizenship, neighborliness, and righteousness. In obedience to the demands of the state the school seeks to give to every pupil a bread-winning power that will put him on a plane of self-reliance, and to instill intelligent and unswerving respect for law and order, together with right views of personal liberty. By thus working for ethical results the school is a moral institution. By making social service the motive behind the morality in which it trains its pupils, the school is laying a sound foundation for their religious life, or if another phrase is more acceptable, it is reinforcing or aiding their religious development.

What the common school has already accomplished in the extension of its own social activities in the direction of transforming itself into the community center is marvelous, and proves to me that the evolution here suggested is bound to come. The development that is upon us today was not foreseen, and those with whom it was a hope were not encouraged in their way of thinking by the attitude of schoolmen. The night schools are with us, the free lectures, reading rooms, play centers, vacation schools, parents' meetings, free concerts. What a wonderful progress this means! But it is only a beginning of still greater things to come.

The schools will become, before long, the distributing stations of central libraries and museums. Many of the great works of art now stored in solemn galleries will be sent out on trips, and the art exhibits in the common schools will give a new stimulus to a universal cultivation of taste for the beautiful. Literary and musical clubs will be invited to make their homes in the schoolhouse. Every form of self-improvement will be given encouragement. There will be circles for dressmaking, millinery, cooking, and all the household and motherhood arts; free associations for local history and geography, practical sciences and arts, theatricals, photography, village improvement, etc. The whole community will be drawn together for intellectual, moral, physical, and economic improvement. The vans that are used in the morning and afternoon to carry pupils to and from school will serve in the evening to convey adults to the common social center which has so long been confined to the narrow boundaries of a school for children. Social service will be the ambition that will characterize the new evolution—social service in its broadest and most comprehensive sense.

The plan I have advocated for some four or five years for reorganizing society in common-school communities is merely a hint of what I firmly believe will be the necessary outcome of the evolution now under way. As the social functions of the school enlarge and increase there must be organization to shoulder responsibilities and preserve order. And this new organization will be found so immeasurably more effective and simple than our present complicated and wasteful system that it will appeal to the good, practical sense of our people as at least worthy of a thoro trial. I know the plan is feasible and replete with new potentialities of social amelioration. If I were not fully convinced of it, I should have abandoned it long since. The new society with its new ambition of co-operation upon the universal principles laid down in the foundations of the American common school—in other words, the common-school community, as I love to call it—is more than a possibility; it is desirable; it is necessary; time will make it mandatory; it is bound to be realized; it will come.

DISCUSSION

C. B. GILBERT, superintendent of schools, Rochester, N. Y.—I would like to give an instance in illustration of one point in particular of Dr. Dewey's great paper.

A principal in our Rochester schools expressed a desire last fall for a night school in his building. It is in a manufacturing district with a large foreign clientage. Saloons flourish, and the saloon corners are popular resorts for both boys and girls. He did not call this a night school, but a social institute.

The principal was a power in his community. He had followed his boys and girls, many of whom had dropped out of school to go to work, and knew where to find them.

They came in large numbers in response to his invitation. He offered them work in the ordinary elementary subjects, but particularly in specialized lines, as sewing, cooking, shop-work, mechanical drawing, music, electricity. He also had a small library reading room and a social room to which parents were invited and came.

The enrollment kept up long after the other night schools were closed. The special classes were full. More than sixty took a hard examination in electricity. Several are already on their way to college. The street corners were largely cleared. The police said that this school was really more effective than they had been.

The school did two things: it made a pleasant place for the young of both sexes to gather, and it offered them special work which met their felt needs.

WILLIAM H. BLACK, of Missouri Valley College.— I have no desire to discuss the very valuable papers which have been read, but to call the attention of the Council to two matters which are of great importance.

First, I wish to present a problem concerning secondary education. Now, so far as the plan of secondary education is concerned, it is pretty well worked out in the cities, but not in the country. We have a number (not nearly as many as there should be) of well-equipped, well-maintained, well-administered high schools and academies, and they are doing as good work as secondary schools probably can. But there is one thing to be lamented, and that is that the people in the country are moving toward the school and the school is not moving toward the people. This is a very serious matter. It means the depopulation of the country in the interest of the efficient secondary schools of the towns, and this means the depreciation of the country, socially and intellectually, morally and religiously. Many of our country churches are dying for no other reason than that the country people are moving into the towns to educate their children in the good high schools. Now this is of course a commendation of those high schools, but it is not a commendation of the situation as it exists in the country. It is a very serious question whether it wouldn't pay in dollars and cents to have the school, the efficient, well-administered high school, move out into the country and get near the people, in order to hold them in their positions in the country, rather than that they should be simply an attraction in the town to draw the best people of the country away from their homes to live in the towns. The country high school has in its favor not only the fact that there are a great many children in the country who deserve the advantages of a secondary education, but also contemplates a situation that is very serious from a civil and a religious point of view. The high school must go the country, or the moral and the social standard in the country will go down. The religious standard in the country goes down unless you have well-maintained country pulpits, well-maintained social life, and well-maintained intellectual forces to play about the people in the country; that means its demoralization, and in the end it looks as if it would be impossible to prevent the formation of a plebeian class. This would be a calamity from the standpoint of our national civilization. I therefore call for a serious, thoughtful, protracted, and honest consideration of this problem.

The second thing that I wanted to say is that you need to be informed concerning a certain movement now going on in the churches. Last April in Pittsburg there was a meeting of the western section of the Executive Commission of the Presbyterian Alliance. This represents all the Presbyterian and Reformed denominations in North and South America. That body asked all the churches represented to observe the second Sunday in September next as a day of prayer for the public schools. Now do not misunderstand this. It was not intended as a day of faultfinding and of storming about the "godless schools," but a day for calling the public attention to the importance of the schools and to stimulating appreciation and helpfulness. Two things incited to this action: (1) A feeling that something should be done to keep the boys in the high schools. It is a common observation that high schools are graduating more girls than boys. I have attended fourteen high-school commencements this spring. In one class there were as many boys as girls; in all the other classes the boys were in the minority, and in two classes there were no boys at all. While I was a pastor in St. Louis a few years ago, I attended a high school commencement where there were fifty-five girls and one boy. That means that there were fifty-four girls in that class who had to marry beneath themselves or become old maids! When the Presbyterians go to praying for an increase of boys in the high schools, the educators of the country should take notice. (2) The Presbyterians have been stirred up on other grounds. Prominent educators have been publicly calling attention lately to the fact that the omission of the Bible from our schools has been a calamity from a literary point of view. Men are finding that a lack of Bible knowledge has resulted in utter inability to interpret the great

English masters like Milton, Shakespeare, and Tennyson. Chancellor Chaplin, in his opening address as president of the Northwestern Association of Colleges and Secondary Schools at Cleveland last March, called attention to the weakness in morals and heroics of our modern school reading books, because of the discarding of Biblical characters and religious ideals. The church feels, along with a great many prominent educators, that the Bible should be restored as our greatest English literary classic. The church is coming to the help of the schools and we should recognize the spirit in which the movement is carried on and the purpose which the churches have in view. That day of prayer for the public schools will be a great day for education if properly used and encouraged.

JOHN W. COOK, president Northern Illinois State Normal School.— I think that Dr. Black is expressing an opinion quite widely current and yet that, as it seems to me, fails to recognize existing conditions. I hear on every hand the utterance of regret because of the urbanizing disposition of our population. The country is looked upon as a primeval Eden from which the young are withdrawing themselves, impelled by some satanic agency, while the city is looked upon as the home of degeneracy. As a matter of course it will be impossible for our peoples to live physically in cities. There must remain the tiller of the soil and the dweller in the village or humanity will disappear and with it our boasted civilization. But we must not forget the radical change that has taken place in agricultural conditions. When I was a boy and living in a village I sought the labor of the farm with great delight. When harvest time came round the homes of the farmers were successively invaded by a swarm of workers. The old-fashioned reaping machine required two men to manipulate it and six binders and two shockers to follow it. Anyone who is now familiar with harvest scenes and who remembers the experiences of forty years ago raises the pertinent question, What has become of eight of the ten men who formerly followed the reaper? Now a driver mounts the self-binder, and one shocker, assisted by the driver in the pause for resting his four horses, is able to set up the grain which has been conveniently bunched by the machine for his accommodation. In the days of the double-shovel plow a man and horse could cultivate four acres of corn between the early beginning of his work and its late close. I saw the other day the new double-row plow, pulled by three horses and controlled by a man who comfortably rides thru the field cultivating fifteen acres a day. Three of the four men formerly needed for that amount of work are thus thrown out of employment on the farm. Indeed, farming has come to be a sedentary occupation. Nowhere have labor-saving devices contributed more completely to the amelioration of the conditions of the laborer.

And now what remains for this surplus population? A farmer with a quarter section of good Illinois land may be regarded as comfortably conditioned. With the assistance of a hired man he can take care of it all very comfortably and have ample space for leisure. If he should be blessed with four or five boys their only resort is the professions or the industrial life of the centers of population. We shall not witness any refluent wave which will again cover the farm with an abundant population. I cannot but think that there is hope, however, for suburban life, in the remarkable facility with which power can now be transmitted. It is quite possible that in the early future the villages will be invaded by industrial appliances which will serve to relieve the city of its congested condition and thus ameliorate the conditions of modern labor by restoring some of the elements that disappeared when the workmen left the home for the factory.

Memorial Addresses

Dr. Charles Collins Rounds

HENRY SABIN, DES MOINES, IA.

On the 8th of November last, Dr. Charles Collins Rounds entered into rest. He sleeps in peace in the Riverside cemetery in his own dear Farmington, Me. His death was a shock to his friends. He was seriously sick for only two or three days. He had just returned from a lecture tour in Kansas and Iowa, and was resting preparatory to a tour in southern California during the winter months. He had for several years suffered from enlargement of the heart, which was aggravated by a cold contracted two weeks before his death; angina pectoris developed, and then he failed rapidly.

Dr. Rounds was born at South Waterford, Me., August 15, 1831. From 1849 to 1853 he was a printer in Portland, Boston, and Cambridge. He graduated from Dartmouth College in the class of 1857, and was principal of the academy of South Paris, Me., from 1857 to 1859. From 1859 to 1865 he was principal of a public school in Cleveland, O., and from 1865 to 1868 a teacher in the Edward Little High School, Auburn, Me., succeeding to the principalship the last year of his stay there. In 1868 he became principal of the Farmington Normal School, where he remained until 1883, resigning to accept the principalship of the State Normal School at Plymouth, N. H. He was at the head of that school thirteen years, that is to say, until 1896. He then spent several years abroad, and on returning devoted himself to educational work, conducting educational conventions and lecturing thru the South and West, New England, and the Provinces.

He was a life member of the National Educational Association; twice president of the New England Normal Association; twice president of the Normal Department of the National Educational Association; state commissioner from New Hampshire to the Paris Exposition of 1899; member of the National Council of Education from its organization, its president in 1895, and member of its Committee of Twelve on Rural Schools.

Dr. Rounds came to Farmington in 1868, at thirty-seven years of age. The school had been in existence three years. It had been established in spite of the strong opposition of conservatism and prejudice. It was without apparatus or a library that deserved the name. Here for fifteen years he fought the fight with tact, resolution, and magnificent faith, and he triumphed. The Farmington pupils have made their mark on the education of this country. At fifty-two years of age he assumed the principalship of the Plymouth, N. H., Normal School.

Mr. Rounds went energetically to work, obtained increased appropriations from the state and town, established a high school with two teachers, graded the other schools carefully, and put an experienced teacher in charge of each grade, each teacher being not only professionally trained, but also a good critic teacher. He graded the schools according to the best city schools. Working with friends whom he had interested in the cause, and among whom Senator P. Blair and his wife were especially active, he obtained large appropriations from the state for new buildings, a fine schoolhouse, and a dormitory.

At the end of thirteen years he left the school the best equipped professionally and doing professional work abreast with that of any normal school in the country.

In this connection I am permitted to quote from a letter written by Senator Blair, of New Hampshire:

> From considerable personal association with him, as well as from observation and the judgment of others, I have come to believe Professor Rounds to have been one of the leading minds of his generation — certainly one of the greatest teachers of his time.
>
> He was broad, and deep, and high. A modest and even a retiring man, except when rallied by a strong sense of duty, he may not have had that ostensible leadership which was his in reality, but I think that the real leaders, those who best knew him and his work, most highly appreciate both.
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> He was the real creator of the normal school of New Hampshire, and first developed with success its peculiar feature, the interblending of the normal with the model schools, whereby the teacher and the taught interchange capacities as it were and are perfected harmoniously together.

I am also permitted to use the following sketch from the pen of Mrs. Blair, who worked with him in obtaining the needed appropriations from the legislature of New Hampshire:

> The work of Professor Charles C. Rounds in the New Hampshire state normal school was that of a master.
>
> He found it unsatisfactory. He studied it as he did whatever was laid upon him to do, intelligently, constantly, giving to it all his splendid endowment of clear vision and executive force.
>
> He widened, and broadened, and upbuilt it on new foundations which he himself laid, until, so far as the means within his reach allowed, the institution was the peer of any in its class. He loved to teach, and his enthusiasm, his aptly chosen language, the mind and soul he disclosed to his pupils marked him a marvelous instructor. Outside the normal school, which owes his memory so great a debt; outside the minds he trained for giving the instruction in the public schools — he was always busy in the general educational problems relating to the schools of the state.
>
> There was not one drop of laggard blood in his veins.

In 1857 Dr. Rounds married Miss Kate Nixon Stowell, of South Paris, Me. He leaves four children, two sons, Arthur C. and Ralph S. Rounds, who are lawyers in New York city, and two daughters, Mrs.

Agnes R. Matthews, residing in Detroit, and Miss Katharine E. Rounds, an art illustrator, who resides with her mother at Farmington, Me.

Charles Collins Rounds was born at South Waterford, Me., August 15, 1831. He died November 8, 1901, at Farmington, Me., in his seventy-first year. It is like the simple story of many a life, but it recalls to our minds today a man who was once honored by this Council with its presidency; one who was earnest and brave, always loyal to his duty, and who never allowed personal considerations to become a factor in ordering his course of conduct.

This man whose memory we honor today was an earnest, enthusiastic teacher, a patient, accurate scholar, and a high type of a Christian gentleman. No shadow of wrong intentions, of selfish motives, of questionable methods attaches itself to his character in any emergency of his life. While he was too brave to shirk responsibility, he was too conscientious to make personal emolument his ruling aim. Time and again while at Plymouth he refused place and position more attractive from several standpoints because his work in that school was unfinished. He was a quiet man—unostentatious, unassuming, but a man of abounding faith. Indeed, it is the very essence of faith so to do the work of today that it may be serviceable when it is needed for the work of tomorrow. One sows and the other reaps, and the reaper rejoices over the fullness of his barns, but the sower is the one to be held in everlasting remembrance.

The eulogy of such a man need not be long. He lived, he did his duty as God gave him to see it, and like a shock of corn ripened in its season, he came to his grave full of years and good works. This is a grand epitaph to be written of anyone, whether he be a peasant or a king.

The life of Dr. Rounds ran in such even channels, he was so intent upon doing his best work every day, that it is difficult to select the strong points in his character and do him no injustice in other respects. He ranked among schoolmen as reasonably conservative, and yet he kept well abreast of the times. In no sense did Mr. Rounds live the life of a hermit. He loved the world, and studied world-wide interests. He believed that all educational questions have a social and political bearing upon all life, and he strove to give them an intelligent and practical interpretation. His life was spent in working for his race. He was a broad-minded man in the true sense of the term.

It was characteristic of Dr. Rounds that whatever he did he had a purpose in view. When only seventeen years of age he chose to learn the printing trade, because it seemed to him the surest way to find access to the world of books. After he had finished his apprenticeship and was working at his trade he devoted part of his earnings to the purchase of books, some of which are now found in his library. It is said that he used to sit up late at night, and rise between 3 and 4 in the morning, to read them, and this habit he kept up all his life. His passionate devotion to books made him a strong thinker, for he digested what he read.

But it could not be said of Dr. Rounds that he was merely a man of many books. He read with his heart as well as with his brain, and the results of this reading were seen in the sturdy, rugged individuality which characterized his manhood.

Dr. Rounds was a close student and a very accurate observer of men and affairs. This rendered his advice and opinions of great value, and they were eagerly sought for. He was not a great talker. He never spoke in any assembly unless he was sure that his words would be of service. He was a good listener, and often in his work referred with surprising accuracy to what he had heard in debates or from the platform. He was merciless sometimes in his criticisms, but his conclusions were always tempered with charity.

He esteemed the practical more than he did the theoretical. In his institute work he was anxious to give the teachers who listened to him such suggestions as he knew would be of use to them in their daily work. He encouraged the use of brains, and was never better suited with his own efforts than when the teachers came to him with questions provoked by his lecture. He was far from being an empty, windy talker himself, and he had no patience with those who were "that and nothing more."

It has been my fortune in later years to know much of Dr. Rounds as an institute lecturer and instructor. In this field he had no superior. His preparation was drawn from the personal experience of many years, and from careful reading and study. He sifted the wheat from the chaff; he brought refined gold from the furnace; he selected the most brilliant diamonds as none too choice for his use.

His preparation was careful and thoro. To redeliver a lecture was to add to it something of strength and force. There was growth all along the line, and the work of his last years was the most finished of his life.

A teacher of some experience said at an institute: "I like these lectures of Dr. Rounds' the best of any which we have had. He makes difficult things plain; he goes direct to the point; he talks English to us."

Another teacher of much discernment said at the close of an institute period: "I heard Dr. Rounds deliver this lecture last year. He has improved it in many respects, and I would like to hear the same once more."

Dr. Rounds was not an eloquent speaker, as men count eloquence, but he was a clear thinker.

Ex-State Superintendent Luce, of Maine, says:

> Dr. Rounds' highest joy in knowing and thinking seemed to be in sharing his knowledge and thought with others. This is the consummate joy of the real teacher, and he was such. So he came to be the master of a clear, cogent, and ready style of speaking, now terse and epigrammatic, now copious and ornate, as subject and occasion

required. And because of his joy in giving others of his best, there ran through the fabric of his speech a thread of mellow, delicate humor, which made others partakers of his joy in giving, and so more eagerly receptive of what he had to give. The same characteristics which marked his oral characterized his written expression of thought and knowledge, only there was a scholarly finish and elegance of diction found in these more studied efforts.

When Dr. Rounds stood before a company of teachers there was that in the tones of his voice which carried with it the honest convictions of his heart, and for this latter reason his institute work was always appreciated by the best teachers in his audience. The miscellaneous institute gathering, made up as it is of all classes and conditions of men and women, is sometimes a difficult one to entertain and control. He knew it, but he never descended to any clap-trap or meaningless jokes, or silly story thrown in to amuse or to provoke applause. He was too thoroly impressed with the importance of his work, and, while not devoid of native wit, he gave his attention to the weightier matters of the law. He stood for the worth and dignity of his profession, and he would not lower his standard to please a restless, unappreciative audience. If he had done that he would not have been Dr. Rounds.

His relation to his pupils was not so much that of a companion as a leader. He had high ideals of life, and by his example inspired those under his care to strive for more excellent things. To earn the real, genuine, hearty respect of the pupils is a more difficult task than to solicit their admiration for brilliant talents, but it is more lasting in its effects. Dr. Rounds' students had a high regard for his scholarship, for his earnest spirit, and for the purity of his daily life. The quick and ready student found in him a wise counselor and guide; the dull and slow plodder, who was willing to do his best, found in his instructor a friend whose words were full of encouragement and hope. But he had no use for the vicious in disposition, or for the idle, lazy shirk.

The following extract is from a letter written since Dr. Rounds' death, by one who was a student under him at Farmington, and who today occupies a prominent superintendency in a large western city:

> I was a student at the normal school at Farmington during the years of 1881-2-3, during which time Dr. Rounds was principal. He was an inspiration in the work and helped many a modest and retiring boy and girl on their way to a better education and inspired them to be good teachers.
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> Dr. Rounds was a man who made strong friends and strong enemies. We sometimes thought he was inclined to be over strict, but he softened much as he advanced in years. He had a very strong vein of humor, always enjoying a good story, and had the ability to tell a good one well. Dr. Rounds impressed those with whom he was associated as a man of large reserve strength, thus compelling the respect and deference of people whom he met.
>
> I consider that the two years spent in that normal school practically made my life what it is, and whatever modest degree of success I may have attained I believe it is due to the impressions I received at Farmington, under Dr. Rounds.

Such letters could be duplicated from almost every state in the Union.

Dr. Rounds was a modest man; he was not self-conscious; he did not believe that the world would stop when he died, or that his death would be an irreparable loss to the cause of education. He was only anxious not to be found wanting in any department of work to which his duty called him. He realized the full force of the word "ought." "I ought to do it," or "I ought not to do it," settled the question for him beyond any further debate. He sought to build this thought into the character of his students, and today, whenever you find a graduate of Farmington or Plymouth under Dr. Rounds, you find a man or woman in whose mind the performance of duty is paramount to everything else.

Dr. Rounds was president of this Council at its meeting in Denver, in 1895. He arranged an excellent program and presided with the dignity and fairness characteristic of the man. That meeting of the Council is recognized today as among the best ever held. At this meeting the Committee on State School Systems made its final report on the Rural School Problem. Dr. Rounds left the chair in order that he might urge immediate action in view of the importance of the subject. The discussion which followed eventuated in the appointment of a committee of twelve to consider the whole subject and report in two years. Dr. Rounds was placed on this committee and subsequently was made chairman of the Sub-committee on Supply of Teachers.

I think he himself wrote that division of the report. He entered with energy and enthusiasm into the general work of the committee. His acquaintance with the country schools of New Hampshire and Maine rendered his services of great value. For years he had been studying the different questions which came before the committee for solution. He thought he saw the opportunity which he had long sought of doing something permanent to elevate the country schools, and it is only a matter of justice that due credit should be given to him for a large share of whatever there may be of excellence in that report. I am very sure that those of that committee who remain and who remember his zeal and earnestness at that time will agree with me in this estimate of his usefulness to us in our labors.

To human sight it seems a matter of regret that Dr. Rounds could not have been spared to finish the work he had in mind. At the time of his death his intellect was not dimmed nor his zeal abated. His work *Psychology for Teachers*, on which he had spent much time and study, was just ready to put into shape for the printer. So also his lecture "Joan of Arc," in the study of whose life he had spent years, and of other matters in which he was greatly interested. But it was not to be.

It is not, however, always given us to clear up the desk, to read the last proof, to write the last letter, to put everything in readiness for the newcomer before we close the lid and go home.

Under a somewhat cool exterior Dr. Rounds carried a warm, emotional heart. He was true to his friends, true to his associates, true to the instincts of his earlier and his mature years, and to the relations which he sustained to his God.

Viewing the life of Dr. Rounds from his cradle to his grave—boyhood, youth, manhood—the membership of this Council can show no finer example of the refining, elevating, broadening influences of unselfish devotion to one great purpose.

In closing I venture to quote from State Superintendent Stetson. He says:

> He was one of the closest and sanest observers of life in New England, the great West, the new South, and modern Europe, produced in Maine. His knowledge of historic, social, industrial, political, and educational conditions made him an exceptionally intelligent and safe investigator in these several fields of activity, and made it possible for him to contribute a master's share toward the solution of our most difficult problems. To all questions he brought a thoro knowledge of the best writers, an intimate personal acquaintance with educational thinkers and workers, a willingness to make a painstaking examination of actual conditions.

At its meeting at Detroit in 1901, this Council paid its last tribute of respect to two of its most honored members. Today, after the lapse of one year, we are again called upon to mourn the loss and to record our estimate of the worth of two others who have passed

"Into the undiscovered country from whose bourne
No traveller returns."

Only one short year has passed—

"So soon does brother follow brother,
From sunshine to the sunless land."

Last year Barnard and Hinsdale—this year Rounds and Parker; next year—but sufficient unto the day is the sorrow thereof.

In the beautiful cypress-shaded English cemetery in Rome, these words of Shelley are inscribed on the monument to Keats. They are appropriate today:

Peace, peace, he is not dead, he doth not sleep;
He hath awakened from the dream of life;
'Tis we who, lost in stormy visions, keep
With phantoms an unprofitable strife.

Colonel Francis Wayland Parker

WILBUR S. JACKMAN, DEAN OF THE SCHOOL OF EDUCATION, UNIVERSITY OF CHICAGO

For almost a quarter of a century it has rarely happened that the National Educational Association has met in its annual session without feeling in some of its meetings the personal influence of Colonel Parker thru his commanding and inspiring presence. It is inevitable, therefore, as we realize that he can return in the flesh no more, that there should crowd to the minds of all of us—his friends—the memories of those days when with words of cheer and serious admonition he sought to uplift and to sustain the members of his profession in the vigorous discharge of their duties to their pupils, to the public, and to themselves.

It has been difficult to choose the theme for this occasion. I need not recall history, for with that you are already familiar. It is vain to speak as a prophet; for the verdict of the future must rest with those who are yet to try the teachings of the great schoolmaster in the crucible of their experience. I would not devote myself to educational theories alone; for on this day of all days it is the man we remember, and not a philosophy. There remain, then, to us who enjoyed his friendship and who knew him well but the simpler things. At this time, when feelings of deep personal loss must supersede all others, it seems most fitting, as it is most pleasant, to pass in brief review those qualities of mind and soul that distinguished him as a teacher and a man.

At the close of an active career, in which he encountered many obstacles, in which he often ran ruthlessly against the wishes and best judgment of his associates and friends, we find that he has endeared himself to the teachers in American schools as few other men in our history have done. To win one's way into the affections of people requires more than a system of philosophy; it requires the spirit of a genuine man. The characteristics, therefore, which give him place are personal not less than professional. Some one has said that when the Almighty wishes to bring about a great event he creates a man and lets him loose in the world. It is not impossible that the future may declare that our fallen leader was such a man. A natural iconoclast, as the sparks fly upward, he was born to trouble. He was the arch-infidel of orthodoxy in educational creeds. Incisive in his thinking, in his best days he could demolish with a word where another, smothering courage in discretion, used arguments in folios.

I remember such an instance on the occasion when I saw and heard him for the first time. It was on the public platform before a convention of teachers in an eastern city. At the close of his lecture on "The Artist or Artisan, Which?" he sat down and invited the teachers to ask some questions. In those days, perhaps more than later, he had an alluring way of drawing out an unsuspecting questioner until he had him fairly focused in the bright light of everybody's attention, and then he would suddenly run him thru with the rapier of his wit. After the teachers had exposed some of the more glaring features of his infidelity as to current school customs, a principal arose as if to apply the final test for his sanity, and said, "But, Colonel Parker, do you mean to say that if the school board made the children buy spelling books and take them to school that you wouldn't use them?" His face became radiant with one of his smiles as he replied, with great show of enthusiasm, "Oh, yes, I'd use them; of course I would; I'd put them into the stove and heat the house with them." It was on that day that he converted my soul.

He was an uncompromising foe to all forms of conventionality—that individual and social stiffness that almost inevitably comes with age. He sought to act upon the spirit of the law, sometimes, it is true, with small regard for the letter. Bound by no conventions and fettered by no traditions, creating none himself, he was ever free to take fresh points of view and to inaugurate new lines of action. Every day was literally for him a new beginning. Great flexibility of mind, which admitted of his constant readaptation to changing conditions, was the remarkable trait in his later years. If he was absurdly inconsistent, his were the inconsistencies of growth—of the flower that gives but little hint of the fruit.

He solaced himself, with Emerson, that "consistency is the hobgoblin of petty minds," and in that consolation his soul remained undisturbed, altho his rapid shifting from point to point in the course of his thinking and exposition was often the despair of his students and the faculty. The result is that he will probably live in the future with the briefest history ever written of a man who has actually done so much. As he declined to accept a creed handed down from the past, so he himself refused to impose a creed upon his followers, or even to suggest a watchword under which disciples in the future might assemble. He has given us no fixed definition of education, but he formulated many definitions as he grew. He has left but few books, and these he himself outlived, and those of us who knew him best will scarcely care to read them except as they represent history, so far do they fall below the level of what he actually was in his work. It would seem, therefore, that the history of Colonel Parker, if ever written, must first be wrought out in concrete form by those who were personally associated with him as students and teachers: and, could he speak today, they, I am sure, would be his chosen biographers.

As to the educational value of the multitude of details that filled his busy days, there must always be widely varying opinions; but as to the great cardinal traits of character there can be no disagreement. He never failed to stand by his convictions regardless of the opposing odds. No considerations of peace or quiet, no thoughts of expediency, no ties of faith or friendship even, seemed to have the slightest weight when he considered that a question of principle was at stake. By a few keen thrusts at fixed opinions in the soberest of conventions he could create a raging turmoil in which his soul found pure delight. Nor was his attitude toward the public less uncompromising than it was toward those whom he opposed within the profession. Many instances may be recalled, such as the night when he went to the city hall to espouse the despised cause of the fads as represented by clay modeling and manual training. At that tumultuous meeting he discounted the tactics of a shrewd lawyer who was supported by a crowd that, it was said, had been "packed" for the occasion. Here is where we shall miss his leadership and support. Will we — will those whom he tried to train in trustworthiness, in times of stress and strain, stand for the rights of the children against the aggressive impudence of those who in the past decade have threatened their welfare? Have we the courage to take up those heaven-born innovations that come from time to time into our schools as fads and foster them until they win their rightful place?

We may with great profit go back a few years and note the growth of rational ideas in school affairs. A few years ago the belief was almost universal that in learning to read a vocabulary should first be acquired thru the use in each of the early grades of a book or two that had been prepared expressly for the purpose of offering *words* to the children. Learning to write consisted merely of training in the drawing of letters. Drawing was an exercise, where it existed at all, that stood apart and alone, utterly useless as a means of expression. We were but emerging from the days of the flat copy into the use of objects that were scarcely more interesting or more educative. The employment of color in painting, as a necessary form of expression in the hands of children, was practically unknown. Clay-modeling had no standing whatever in the curriculum, and it was the focal center against which all the anti-fad diatribes were hurled. Even manual training was in its infancy, playing almost no part in the related work of the school. It was in 1883 that there was established in the Practice Department in thé Cook County Normal School a manual-training room, which, I believe, Colonel Parker claimed was the first of the kind in this country. In one of his reports he says: "My first experience of genuine spontaneous attention was the sight of the first class at work with saw and plane." Thru the proper functioning of the various forms of expression they have now been placed among the means of study, whereas before they had been regarded as ends in themselves. Within this period, too, falls the discovery that the invention of the printing press, with the art of printing, is a practical and invaluable adjunct in modern educational methods. For years the work in the normal school was almost at a standstill for the reason that no natural connection could be made between the experiences of the children and the books with which they could be supplied. But the fad of the printing press, expensive and troublesome as it was, solved the difficulty and gave a tremendous impulse to every phase of work in the school. The greatest blessing of the decade, however, was the discovery that the children were being starved on the dessicated verbiage of the books. This led to all there is of nature study and the occupations, and to the new geography.

It would be preposterous, of course, to assume that these rapid and revolutionary changes were brought about by Colonel Parker alone; and were he here today he would not permit the claim that these results, so far as he was concerned, were attained thru the discovery by himself of anything entirely new. But no one familiar with the facts will deny that he played an important part. His virtue lay in trying to do, and in a measure succeeding in doing, what others for centuries had said should be done. He did not do the actual work of his subordinates, it is true. But he encouraged, he inspired, he supported, he protected them, and made their work possible. He was able to do this because he completely controlled the situation. Never was responsibility for a great work more happily placed. He made common cause with the least of his teachers. He praised work that in itself was often abominable and indefensible, except that it represented honest effort and displayed elements of originality on the part of the teacher. Many, many times he said, "Go ahead, work it out; now it is crude, but something good will come of it I am sure. We will stick together; and, remember, if they get after *you*, they must take me first." Will our schools ever succeed until the principals everywhere seek as patiently to cultivate the individual strength of their teachers, and thus as heroically defend them against superintendents, the boards of education, and even against the people themselves? It was in the face of opposition almost up to the point of bodily violence that the teachers were able to contribute their best efforts toward the demonstration of a few things that are now generally accepted as true. They ranged thru the whole domain of nature and man to find the appropriate educational content for the children in every grade. No matter how unusual the region of research, scarcely a corner in the field was left unexplored. Reading, and to some extent number and all the forms of expression, were brought into harmonious relationship with each other and to the central or nutritive subjects thru the necessity for their use as a means of study.

Colonel Parker's work was a distinct and practical contribution in an organized effort to supplant empty symbols with vital things. In this he was always stubbornly aggressive. When Froebel said, "Come, let us live with the children," he introduced the era of the new education. How often have we heard the man whom we honor today repeat the watchword of the great reformer! Like Froebel himself much that he accomplished grew out of a genuine love for little children. They were neither rich nor poor, neither high nor low—they were children all alike to him. The leaven that is leavening the whole lump of the educational systems of the world is the care now bestowed upon childhood. It was his careful and loving consideration of the child, of his physical, mental, and moral needs, that enabled him to do so much toward revolutionizing educational methods. It was genuine affection rather than philosophy that stirred him to send the children into the fields and woods to live with nature, thereby inspiring them with a love for her and infusing them with a spirit of freedom. It was love back of reason that moved him to provide the children with the wholesome and happy industry that makes them at once interested partakers in the world's work and life. Because he worshiped at the shrine of childhood he did much to relegate the poverty-stricken skeletal text-books to oblivion and to put in their places the best of the whole world's literature. From sympathy and an innate sense of justice which grew out of his real belief in the actual goodness of children, he supplanted methods of force and cruelty with those of courtesy and kindness; and thus, by example rather than by logic, he has taught us to substitute law for caprice in our educational system.

As a means to the great end of education he believed in the scientific training of teachers. The training he sought to cultivate was developed thru constant practice under motives of the purest altruism. He tried, therefore, to establish in the school those normal relations under which human beings must always live. Hence his earnest endeavors to identify the work of the school with the interest of the home. Accordingly his conception of the duties of the teacher called for wide and genuine knowledge and also for the most expert skill in its application to the art of teaching. His students will easily recall how endlessly he toiled to secure the proper conditions to bring into active use all that they had ever learned, whether it was in school, in the city, or on the farm. It was a peculiar and most unusual type of mind that he could not inspire with a love of study and a desire to act.

The source of his inspiration lay not in sounding phrases, but in the fact that he was a toiling student himself as well as a mighty doer of the word. He browsed incessantly in books without becoming their slave. He had the boundless interest of a true student in everything in nature, whether it was on the earth, in the heavens above, or in the waters underneath. He was full of the idea of final usefulness and ultimate design, and under this conception he perpetually labored to arrange all things in a symmetric and rational whole. His interest in childhood, in the class-room, and in the school was, however, but a part of his larger concern for the thoughts and doings of people; and they in turn were always mightily attracted by him. He was a born leader, and while many gave him but grudging allegiance, yet by cogent reasoning, and at times by reckless dash, he compelled the educational world first to listen and then to follow. His profound belief in his personal mission added impressive influence to what he said and did. He spoke only to deliver a message; in every act he moved toward a definite goal.

He never apologized for his being a teacher, but he endeavored to magnify his calling and to raise it to the level of a profession of which he sought to make us proud. He carried the energy and vitality of a dozen men into the single purpose of his life, but he allowed no strength to be absorbed by side issues. He was absolutely immune against the itch of greed, and he could spend his last dollar like a king. Not all the speculative fury of Chicago in the days of her greatest boom could cause him to swerve from the straight and narrow path of the consecrated teacher.

No sketch of Colonel Parker can be complete if it fails to accord to the work and influence of Mrs. Parker an important place. Cool-headed and clear in her thinking, with deep insight into the actual worth of men and things, she was his constant counselor while she lived, and many times she did yeoman work in helping to turn the wavering scales in his favor. She knew him and understood his work and appreciated his trials as perhaps no one else ever could. A brilliant teacher, original in her methods, a graceful and effective speaker, in the class-room, in the faculty meetings, and on the public platform she was always a loyal supporter and an intelligent exponent of his ideas and work.

It used to be a motto of Colonel Parker's that we should plan as if we expected to live forever, but work as tho we knew we should die tomorrow. Living in accord with this sentiment, no man was ever better fitted to live, and no one could have been more fully prepared to go. After a great work for long years in behalf of the children, teachers, and the people, at a time when a new epoch of great promise opened before him, he was called upon to lay his burden down. Thus to die on Pisgah's heights were sad indeed had he not with each rising sun entered into his land of promise, where he reveled with its flowers and fruit. "Time is the false reply," said he, "and heaven is quality." The living present kept full to the brim his cup of joy. His ashes peacefully rest mingled with the soil of his native New Hampshire. But his spirit will live everywhere in the hearts and work of thousands of teachers, and thru them it will continue to minister to the welfare of the children and the race.

"— his triumph will be sung
By some yet unmoulded tongue
Far on in summers that we shall not see."

REMARKS

DR. E. E. WHITE, COLUMBUS, O.

To those of us who are living on borrowed time, these occasions of tribute paying to the memory of our departed associates are specially impressive. As we see the ranks of those who were our early associates in this Council and in the National Educational Association thinning year by year, we realize that we shall soon pay our last tribute and join the departed.

When I was state commissioner of schools of Ohio, all too young for such a position, two young men were principals, respectively, of public schools in Cleveland and Dayton. These young men were Charles C. Rounds and Francis W. Parker. It was my privilege to visit the Kentucky Street School, Cleveland, in charge of Mr. Rounds, and so favorably impressed was I with the man and the school that I improved the first opportunity to open to Mr. Rounds the superintendency of an Ohio city. He declined the position, feeling it to be his duty to return to Maine to be near his aged parents. He accepted there a position at less than one-third of the salary offered him in Ohio, but this, in the providence of God, opened to him his life-work as principal of the normal schools in two New England states, Maine and New Hampshire. I cannot add to what has been so well said of his work and influence in these two positions, or to Dr. Sabin's intelligent estimate of Dr. Rounds' ability, character, and standing as an educator — an estimate that has the merit of overstating nothing.

From our first acquaintance in Cleveland to Dr. Rounds' death we were close friends; and our friendship grew closer from year to year. In the last few years of his life we were associated each year in the instruction of teachers in different states, and in this relation I had the opportunity to form an intelligent judgment of his ability as an educator and of his high character as a man. I was most favorably impressed with his ability to see the relations of educational questions to other questions, which guarded him against the weakness of exploiting half-truths as universal principles. Dr. Rounds was too comprehensive a thinker to be a hobby rider. In his death the cause of education has lost one of its sanest advocates.

After his patriotic service in the army, Colonel Parker did not long remain in Dayton. He went to Germany to prepare himself for what proved to be his life-work. We next heard of him as superintendent of the schools of Quincy, Mass., where his reforms in school work attracted the attention of the country. From Quincy to his death, Colonel Parker was a conspicuous figure among American educators; and it was fitting that the Council's tribute to his memory should be voiced by one who was his intimate associate in the closing work of his life — a just and loving tribute to an unique and noble service.

I was not only associated with Colonel Parker in the Association and Council for years, but we were at times co-instructors in teachers' institutes and summer schools. While I could not accept all that seemed to him at the time the very gospel of education, we held a considerable body of educational doctrine in common, and we certainly heartily agreed in our advocacy of more vital school training — a wiser and more consecrated effort to meet the needs of childhood. So far as I know, there never was a break in our friendship.

It is probably too early to determine definitely what are the contributions which Colonel Parker made to the improvement of the American school. He wrote little which may permanently abide, and no one saw this more clearly than himself. He once said to me, as if in jest, "I write to put my errrors behind me." Indeed, most of Colonel Parker's positive utterances were tentative. He reserved the right to reject or modify tomorrow what he uttered or held today. He said of himself: "I am a searcher for the truth." It remains for his disciples and associates to select and formulate the teachings of Colonel Parker which may have abiding value in the perfection of American education, especially of elementary education.

One thing, however, seems to me clear: Colonel Parker will live in educational history as the devoted apostle of childhood. In every child he saw the image of God, and so he not only loved, but, in a sense, worshiped little children. I never heard him speak on child training that he did not seem to be in the presence of a group of children under eight years of age. His school vision was horizontal. He rarely lifted his eyes to the upper grades or to the college. In the center of civilization he saw a little child; and the one thing to him eternally true was that the wise and loving care and nurture of that child would make all human interests secure.

MISS BETTIE A. DUTTON, Cleveland, O. — It would not be fitting after these beautiful memorial papers to attempt any formal analysis of the character or of the work of Dr. Rounds; yet I would bring at least a single leaf to place in the garland which Dr. White has wrought, in tribute to these, our brothers, whom we have today in loving memory.

Dr. Rounds was to me indeed as a "brother beloved." Coming to the principalship of one of the Cleveland schools when a young teacher, intimately associated with my own brother in his teaching and in our home, it was my happy privilege to be taken into a comradeship which was then, and has ever since been, of priceless value to me in my educational work. Mr. Rounds was but six years a teacher in the schools of Cleveland, yet he left on the work in that city an impress which has never been effaced. Remarkable evidence of this permanence of impress was not long ago afforded when returning to his eastern home from a lecture tour in the West. He stopped in Cleveland for a brief time, when informal opportunity was given his friends to greet him. They came in throngs — not former pupils alone, but patrons and friends, business and professional men — bearing glad witness to the value of the instruction received from Dr. Rounds in their early school years. It was a royal greeting, worthy of prince or king. With Dr. Rounds' loyal devotion to the integrity of this Council and to the National Educational Association you are all familiar; yet you may not have known, a fact revealed in committee work, that more than once were the highest honors of each offered to him, and on his part declined on the sole ground of his belief that they should go to another. No personal preferment, no possible gain had weight with him, balanced in the light of fair dealing, of absolute *right.*

With Dr. Rounds as president, the Denver meeting of the Council was a memorable one — a meeting of rare value and vigor. Those present at the sessions will readily remember how graciously he presided and how effectively he succeeded in realizing its early ideals as an educational "Council."

JOHN W. COOK, President Northern Illinois State Normal School.—I have been especially interested in the remarks which have been made upon the life and character of my dear friend, Colonel Parker. It is with some hesitation that I attempt to add a word to what has been said, for I feel that whatever is uttered upon an occasion of this kind should be most carefully considered. I am reluctant, however, to keep my seat, and hence beg your indulgence for what I shall have to say.

The most striking characteristic of Colonel Parker was his sublime faith in childhood. He loved to idealize it and to clothe it with all that was beautiful and full of hope. Any disposition to interfere with its spontaneity, to lessen its joy, to make life hard and mechanical, brought to his lips the most strenuous and indignant protest. His sublime faith in the possibilities of humanity gave him the most exalted estimate of the function of the teacher. To his thought there was not in the wide world so sacred a calling. No other position was such a vantage ground for help to humanity. He was forever shaming us for our low ideals and for our inadequate conception of the dignity of our calling. He would have the teacher at once the most rarely gifted by nature and the most generously equipped by training of all of the workers of the world. In consequence of this fiery enthusiasm he was unique and fascinating. To oppose him seemed like assaulting a sacred cause. It was inevitable that his extreme views should encounter hot and passionate opposition. I never found myself combating any of his notions, however, without a lurking fear that such opposition might identify me with that Philistinism which regarded with indifference his fundamental doctrine of the worth of the child and the inestimable value of the teacher.

Colonel Parker has left no successor. In his mental constitution he was thoroly individualized, and the qualities which gave him such extreme prominence were largely personal rather than doctrinal. His influence was immediate and direct. He could not bear to write books; hence nothing that he has contributed to educational literature can fairly reflect his charming personality. It seemed to him so inert without his insistent word and admonition and suggestion. He was at his greatest and best in the presence of his pupils, where his principles were reinforced by apt illustration, by delicate suggestion and gesture and expression, for there were volumes in his smile and in his anger.

I am not of those who think that his work was done or that his life was so completely rounded. I am sure that he did not think so of himself. In our last interview, covering some hours of close companionship, and shortly before the tragic close, he was constantly looking forward to the great things that were to come with the splendid opportunity that awaited him, and if fate had kindly permitted a few years more of active life I am sure that we should have seen the richest fruitage of his splendid career.

The permanence of his influence will rest very largely with those who shall discuss to others his character, his principles, and his methods. An interesting chapter in educational history is yet to be written in order that this intense spirit may show its majesty to new generations and fire them with some of his passionate ardor.

DEPARTMENT OF KINDERGARTEN EDUCATION

SECRETARY'S MINUTES

WEDNESDAY, JULY 9, 1902

The Kindergarten Department met at 9:30 o'clock Wednesday morning, July 9, in the First Congregational Church, Miss C. Geraldine O'Grady, president, in the chair.

Dr. D. L. Kiehle, professor of pedagogy, University of Minnesota, gave the address of welcome.

The president appointed as nominating committee:

Miss Sarah B. Goodman, St. Cloud, Minn., *chairman*.
Mrs. J. N. Crouse, Chicago, Ill.
Miss Corinne Marcellus, Chicago, Ill.

The Committee on Resolutions was appointed by the president, as follows:

Miss Minerva S. Jourdan, Chicago, Ill., *chairman*.
Miss Alice Baird, Marshalltown, Ia.
Miss Ethel E. Barr, Racine, Wis.

The president prefaced the more formal papers with a statement of the aims of the meeting. The following papers were then read:

"Hindrances in the Development of Language," by Miss Cecilia Adams, supervisor of kindergartens, Denver, Colo.

"Froebel's Suggestions on Fostering Language," by Mrs. Alice H. Putnam, superintendent of the Chicago Froebel Association Training School.

These papers were discussed by Mrs. J. N. Crouse, of Chicago, Ill.

The Girls' Glee Club, North High School, sang: (*a*) "Annie Laurie," Dudley Buck; (*b*) "The Broken Pitcher," arranged by A. N. Edwards.

The discussion was then resumed by Miss O'Grady; Miss Ada Van Stone Harris, supervisor of kindergartens, Rochester, N. Y.; Miss Minerva S. Jourdan, *Kindergarten Magazine*, Chicago, Ill.; Mrs. Alice H. Putnam; Miss Sarah C. Brooks, principal of Teachers' Training School, St. Paul, Minn.; and Mrs. Alice W. Cooley, department of pedagogy, University of North Dakota, Grand Forks, who summarized the topics under discussion.

Miss Mary C. May, director of kindergarten department, State Normal School, University of Utah, read a paper on "The Need of English Study by Kindergarten Students."

The paper was discussed by Mrs. Ogden, of Minneapolis, and Miss Goodman, of St. Cloud, Minn.

The nominating committee reported the following names:

President—Miss Anna Williams, Philadelphia, Pa.
Vice-President—Miss Stella L. Wood, Minneapolis, Minn.
Secretary—Miss Clara Wheeler, Grand Rapids, Mich.

The report was adopted and the nominees declared elected as officers of the department for the ensuing year.

The meeting then adjourned.

THURSDAY, JULY 10

A joint session was held with the Department of Elementary Education, in accordance with the program as given in the minutes of the secretary of that department.

The following resolutions were submitted at the joint session, and passed by the kindergartners present:

WHEREAS, The kindergartners in attendance upon the National Educational Association at Minneapolis in July, 1902, appreciating the many courtesies extended to them, desire to make the following expression:|

Resolved, That the kindergartners attending the convention express their appreciation to the local committee which has so carefully provided for their comfort, and especially to Miss Stella L. Wood, chairman; to the board of trustees for the use of the First Congregational Church; to the press of the city for reports of meetings; to the Remington Typewriter Company for valuable service; and to the Elementary Department for participation in the department meeting on Wednesday, and in their courtesy extended in the Thursday meeting.

MINERVA S. JOURDAN, *Chairman*.
MARY C. MAY.
ETHEL E. BARR.

Miss Baird being absent, Miss May took her place on the Committee on Resolutions.

The department then adjourned.

MARY C. MAY, *Secretary*.

PAPERS AND DISCUSSIONS

ADDRESS OF WELCOME

DR. D. L. KIEHLE, PROFESSOR OF PEDAGOGY, UNIVERSITY OF MINNESOTA

Ladies and Gentlemen, Representative Kindergartners of America:

It is always a pleasure to us Minneapolitans to welcome representative Americans to our fair city. We are modestly proud of our virtues. We are especially proud of our young city, its scenery and its life.

To you, kindergartners and lovers of childhood, we offer the hospitality of our city and its surroundings, and present it as the magnificent kindergarten of the Northwest. We have the children, and we have the equipment of a kindergarten in nature's adornments of walks, gardens, lakes, and groves of flowers and birds.

We now welcome, above all others, this choice company of men and women who by their presence will quicken our love of children, and will intelligently direct us in developing their best life, until in the full capacity of their nature they are in sympathetic and intelligent unity with their threefold and complete environment.

Until men and women began with the love and study of childhood, we had no philosophy of education broad enough to comprehend humanity in all its relations and all its powers. Until the rights of childhood and the obligations of Christian and civil society to the care of children in the attainment of the freedom to which they are by nature entitled—until these were recognized there was no adequate interpretation of education applying to all its stages from the cradle to the grave.

But I shall not take advantage of this opportunity of welcoming you, and take the time in talking that belongs to you who have come from far and near to be heard.

Our most cordial welcome will appear in the appreciative attention we give to your inspiring words, expecting to gain an uplift which will make us all more loyal to the principles of Froebel, and more intelligent in applying them to the education of our youth.

May your abiding with us be pleasant, your return to your homes safe, and your memories laden with kindly feelings and good thoughts as the fruitage of your journey.

PRESIDENT'S ADDRESS

MISS C. GERALDINE O'GRADY, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK CITY

My attention was called some years ago to the importance of language in connection with our work, and I have found the study of it exceedingly profitable, In a very old book, the beauty of whose ideas and language is acknowledged even by those who do not believe its teachings, there is a parable of a valley of dry bones, breathed upon by the spirit, and of how "bone came to his bone," and they arose and stood upon their feet an exceeding great army. Like this, it seems to me, words without the spirit of thought are disconnected and lifeless, while thought without words is formless, invisible, inactive.

The problem of the relation between thought and expression, and how to educate each thru the other, is really the problem of all education. Just because the problem has been a general one it has not been defined and limited. The only sure way to master a general idea is to master each of the special ones of which it is a synthesis. But in order to do this we must look at them one at a time. I was awakened to this problem thru my experience in training normal students, and at the same time thru my work as a primary teacher and kindergartner.

I have worked on what is called the "development" method, and this has made me observe the ideas and expressions of those whom I taught. The children showed in both thought and words an incomplete, partial, and poorly mastered power of expression. This was only natural; it could not be otherwise, and was to be overcome by time and education. But when I realize more and more every year that not only the children, but the majority of normal students, express vague and indefinite ideas, in incomplete and indefinite language—that I rarely come upon one whose thoughts and expression are clear and definite—I feel that these defects have not been overcome by time and education, and that in this line at least we have very poor results from twelve or more years of school life. It seems as if teachers who show to such a degree the same defects as the children are not likely to help them to clear ideas and definite expression.

I have realized this even more since I have made some special study of children. Their own expression is largely thru action, material, and other incomplete phases of, or steps toward, language; but these are, or ought to be, only phases of expression: the climax surely ought to be full power to think in words. What is the use of our recognizing the rudimentary forms of expression as a starting-point, if we never carry the process to its completion? What is the use of trumpeting the principle of "going from concrete to abstract," if we never arrive at the abstract, that is, at power to deal with it? Many people, of course, have recognized such defects in our education; the efforts to secure improvement in preparatory English made by Harvard and other colleges of late years, and their result on the high school curriculum, show that this problem has been recognized. But what proportion of our teachers go to college? What proportion of teachers in the elementary schools have had a high-school training which included adequate work in English? As long as 90 per cent. of our population does not go farther than the elementary school, are not our educational problems concerned chiefly with that? It seems to me, therefore, that we may well study, more than we have done, how far it is possible to increase clear thinking and clear expression in the earlier years.

Froebel speaks over and over again of the value of "the illuminating word" and of the "peculiarly human spiritual power of language." He says that to arouse the child to consciousness of himself and his powers is as much the task of education as that of life is to make man conscious of his. This morning we will consider one aspect of this power.

HINDRANCES TO THE DEVELOPMENT OF LANGUAGE

MISS CECELIA ADAMS, SUPERVISOR OF KINDERGARTENS, DENVER, COLO.

In the beginning of child study the kindergarten was devised to meet the needs of the normal child; but as our experience widens we find many classes of children in various stages of development, and the methods and mental food suitable for one stage will not develop and nourish the child in another. It is our duty, then, as teachers, not to appeal to any one class, but to understand the different shades of mentality and give light to those below normal as well as to the bright and precocious ones.

The child seems to have two births; the one liberates the physical body, and the other, due to environment, liberates the soul. It is the latter with which we have to work in our educational methods; and the question comes: How shall we, thru environment, bring freedom to those who have been hindered in the development of their normal physical life? In a group of fifty children there will be five or ten who are responsive and lead in all activities; the others are quiet and passive, perhaps are confused by the multitude of companions. It may be some do not hear what is said and grasp imperfectly the topic of discussion, while some speak so imperfectly that they prefer to remain silent. These latter cases, if not at once, are in time liable to the disease of aphasia because the brain and speech organs are not working in unison. Many of these troubles are caused in children by lack of nourishment. Some children are so affected as to be weak in body, indolent and phlegmatic in mind. Sometimes the poorly nourished brain is affected thruout, sometimes only in special centers, as the eye, the ear, or the motor cells. All must work in harmony for perfect expression in speech.

It is difficult for the public to control the child's nourishment, upon which life depends, but we can understand the result that follows the lack of nourishment, and change our methods of instruction to suit the stage of development.

Every individual is born into this world complete in his pattern. Our patterns vary, but all unfold exactly alike as the race advances step by step. The study in science is revealing these steps and leading us into an open path by which we may walk hand in hand with these unfortunate little mates.

In the order of development the higher faculties of the mind are the last to reach perfection. At first we have only sensation, then memory asserts itself, following which comes the development of imagination, comparison, and judgment, giving to the mind reason.

Speech and language are the last of the brain centers to develop and are related to the higher faculties of the mind. Speech and language are not synonymous, for in speech we have simply the word produced by imitation, and in language we have speech in its complicated form—words in sentences. Speech comes early, but language is not expressed until the concepts of the mind are formed. Disease often attacks the brain so as to affect the language, but not the speech, the speech centers remaining in perfect activity. The speech defects may be due to the defect of the auditory-sense organ or the word-hearing center, the word-comprehending center, or the motor-speech center, or the connecting fibers between these centers. That is, difficulty may exist in the receptive or emissive speech mechanism. One part may be affected without the other center suffering. The child may understand, but not talk. He may talk words thru imitation without comprehending sentences. If the receptive faculties are impaired, there is little hope, but if the emissive speech only is inactive, it requires skill on our part to eliminate the difficulty. The undeveloped child, like the infant, begins to express himself in simple words. The infant would say "man," "boy," "bow," "wow." He does not question where nor what, but names the object. It is a much longer time before the child will be able to say, "papa comes." This requires a higher act of the mind.

The many percepts of the brain form themselves into words. Words then enable the mind to free itself from things, to deal with abstract forms of life and arouse to activity the highest centers of the brain, on whose functions all knowledge of the external world depends. Without this activity the external world remains isolated, the brain only holding groups of impressions.

The dumb suffer intensely from inability to express their feelings in words. The child has gathered his impressions thru the eye, but he is unable to express his feeling and knowledge, and so is thrown into a violent temper. We find little children's dispositions changing and self-control manifesting itself as they meet the problems of the world thru the higher functions, which express themselves in speech and language.

In the kindergarten we are increasing the perceptive faculties and relating them one to another in order to strengthen the concepts that the child may have the power of language. We cannot strengthen these concepts if there is not the power of expression, and we can not develop language if there is not the power of speech. So to help the silent children we must first find whether the physical organs of the child are such that he may speak correctly. Speech is made by the contact of lips, teeth, tongue, and hard and soft palates, and is formed by the vibrations of air confined in mouth and throat. In all languages the sounds are similar. This must be so, for all mouths and throats are similar; we differ only in our combinations. So in schools where the foreign children are found and the language expression is poor, it is the combination of sounds and words which we must teach, if the organs of the child are perfect. The teaching of songs, if taught properly, helps these little people, and especially the timid child; for they not only acquire by imitation the construction of sentences, but have an opportunity to pronounce words when others are speaking. I have noticed children entering into this exercise when they would not use their voices at any other time. I wonder if we are good models in enunciating words, that the child may imitate us and hear clearly the correct sounds in the word. If the child can see and hear us give the words in a clear, articulate way, it will not be long before he has control of his organ's speech.

During the kindergarten period of the child's life, and a few years following, the child is most active in acquiring language. He is not only adding to his vocabulary, but during this nascent period constructs his own language by which he may communicate with his own special tribe of playmates. We find it natural for the child to struggle for power to express his thoughts, and when the child is not apt in this development, he is retarded in his natural growth.

How do we find the mechanism of speech developing? First with the open sounds, such as *ē, ā, a̤, ō, o͞o*; these in their combinations of long and glide are the fundamental sounds. They are made by animals and are the first sounds formed by the human infant. These sounds may express feeling, but not thought. There must be combinations in tones to form the word, so we have the articulate sounds which are made by the contact of lips, teeth, and tongue. When the speech centers in the brain begin to grow the baby begins to put sounds together, such as "agoo," "ma ma ma," etc. These simple exercises are all in preparation for the formation of the word; the word will come forth when the feeling has aroused the brain centers to action.

All speech, then, is dependent upon the mechanism of the mouth, and the mouth-parts are dependent upon the nourishment of the child. In the fœtus the mouth passes thru many changes, from the simple opening to a closed cavity with vibratory tissues. If during the stages of fœtal life the nourishment is not sufficient, the tissues stop growing, and we have the cleft palate and the cleft lip. In the cleft palate the upper mouth parts did not come together to give a sounding board and the cleft lip did not close to produce precision in the sounds uttered. Without this palate the sounds drift off into the upper parts of the head, not giving the lips a chance to articulate them. The soft palate is situated at the back of the mouth and resounds and vibrates with every concussion of air given out by the larynx. Sometimes this tissue is hardened and stiffened by disease, most commonly a catarrhal condition. The voice in this case is hard and metallic. Frequently the catarrh causes the tissues to swell to such an extent that the ears are affected, and in this case the speech will suffer.

The use of the voice with the speech organs in this condition causes weariness; and if the disease attacks the child in the nascent period, it is apt to check his desire to use the voice, and the child acquires a habit of remaining quiet and passive in thought and inattentive to the world about him. All action begets action; so all expression begets thought. It has been my experience that most talkative children are the most active mentally, keen, and definite in imagination. They lead in our kindergartens and often take up unduly the attention and time of the teacher. She becomes absorbed in the active brain and does not see the passive little mind, drifting along waiting for someone to help lift the burden of imperfect development. If the brain centers do not express themselves during the nascent period, they shrink away like an unused muscle.

Catarrhal diseases must be treated by a physician, but this trouble, not like the cleft palate, can be helped by us. Use of these parts helps to exercise them and prevents a diseased condition from developing. Exercising the tissues with head, chest, and throat tones keeps them in action and flushed with blood. Catarrh may affect the ear to such an extent that the child becomes deaf. He may not hear an ordinary conversation, but would hear music, or one word repeated several times. We frequently have children in our care for weeks without knowing of this defect. They become attentive with the eye, and so deceive us, but are only grasping part of the thought in the work presented. These children must be taught as we would teach a deaf-mute. They should watch our mouths, feel the placement of tone whether in the head, throat, or in the expulsion of air from the lips. As these children learn to speak they will hear better. One function helps the other. We hear a new word frequently after our attention has been called to it. It is customary to place near the teacher the active child who is already quick, but who holds the place thru the teacher's inability to extend her controlling influence. The deaf and timid children should be near her. They need the stimulus which comes from close proximity to the teacher's mind. The deaf need to see her speak, and the timid one would gain confidence if he could speak without the others hearing; and, once let him gain assurance, he will never retire to his shell where progress of the soul is deadened. We have no life if we have no expression; and a lack of expression in early life results in a morbid mind in maturity. My attention has been called to these quiet and defective children in our schools, and it seems to me our methods do not always reach them. If this environment which we are to give the children develops and liberates the soul, we must not let two-thirds of the children in our care suffer for want of help.

The modern education claims to develop the individual; our society calls for the individual force. We no longer recognize the class which is simply led by its leaders; but individuals each of whom stand for an idea. If this is the aim, then the abnormal child who is just below the normal standard—the deficient child who is deaf or slow from lack of nourishment or disease, and yet too young to attend a state school, too young to leave mother for more than a few hours—belongs in our kindergartens, and we must extend our knowledge to meet this undeveloped class.

In Denver we have taken them into our kindergartens this year, and the addition of these weaker members has developed a beautiful spirit of helpfulness among the children. They have felt the care, and not only have sympathized, but have turned into little teachers, as well as pupils.

I should like to make an appeal to teachers to devote more time to the study of the natural order of growth, that we may understand all stages of brain-development. When a child is found retarded or detained in life, we should see that it is not cast out because our curriculum does not fit it, but that it is brought into an atmosphere which will help it to find its point of contact. If we do not bring help, how can the primary teacher work with the child? She must work for a grade, and must class the children. They have not the opportunity that we have in the kindergartens for individual help, and so the little child is cast out during his impressionable years to seek his own environment, let it be what it will — for good, or bad, as the case may be.

HOW FROEBEL PLANNED TO FOSTER THE CHILD'S POWERS IN LANGUAGE

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Today, when the educational psychologist is abroad in the land, one treads on dangerous ground in standing for any method which does not rest on a principle which is inherent in the conditions of the being to be educated. Without some knowledge of the aims and possibilities of development in any given method, we cannot judge correctly of its value. Therefore, to decide on the worth of Froebel's idea in this case, we must look at the language situation of a young child.

The little baby begins his operations in oral language by means of sensations, for, if sounds are to be intelligently made, says Tracy, they must first be heard. The child makes his first utterances, whether of pain or pleasure, simply because he cannot help it. Whence comes this desire and power? I do not know, save that it is from within — probably from heredity, for we know that the "child is the fruit of the past, as well as the seed-corn of the future."

Preyer, Perez, Taine, Sully, and many others have shown something of the processes in the growth of a child's language. It is enough for our discussion today to say that the power to hear and to make sounds comes very early, and that before the baby has ended the first year of his life, he makes sounds that are intelligible and gives back those which others make.

Here again we are thrown back to the question of aim or purpose in this particular plan of development. Froebel says:

> The function of the educator in any subject consists, above all, in helping everybody to observe his own life, and to act it out according to its being and its demands. In such a life the personality is purified and viewed in the mirror of the experiences of others, as in the natural life of man and mankind, in the mirror of nature, of history, and of revelation.

To be quite sure that this idea spoken long ago holds good in our day and generation, we place side by side with it Professor Small's statement in the "Demands of Sociology on Pedagogy." He says:

> The end of all education is, first, the completion of the individual, and second, which is implied in the first, the adaptation of the individual to such co-operation with the society in which his lot is cast that he works with the society in perfecting its own type, in creating conditions more favorable to the development of a more perfect individual.

All thru the past the little child has been led to "observe his own life"—to increase his individual power in language by the instinctive response of the mother to the child's effort. This is true in the development of written and picture expression, as well as in that which comes first—oral language. "But more potent than all external stimuli," writes Froebel, "is the child's passionate impulse toward a development of his own being, which shall be, on the one hand, spontaneous, on the other, in accord with the universal trend of life." The aid to be offered is to be determined by the child's progressive needs. I think it will help us to keep clearly in mind the child's language stages, if I borrow an analogy from a prominent geologist who, in speaking of the earth, says: "Each special characteristic area of its surface has its prenatal conditions, its birth, babyhood, its childhood, maturity, old age, and decay."

Froebel certainly recognizes something akin to this in the processes of that form of expression which we are considering. There is the prenatal formation of the organs of speech and hearing. There is a time after birth when these are quite at the mercy of surrounding conditions; when there its little, if any, power of resistance to what is external; when all that is to nourish the language-power of the child comes to him unconsciously, and we might also say vicariously. It is just here that Froebel's scheme begins to ultimate itself. The child himself, we must remember, is the prime factor in the problem, but the mother's love, the mother's song; and mother's play are also very vital ones. Froebel appeals at once to the "working energy" of the child, no matter how slight that may be, and tho the child himself is altogether unconscious of the outcome of his efforts. Because he does hear, because he will soon listen, the old master considers it worth while to give something that has a hearing and a listening value. With her baby in her arms, Froebel read in the mother's instinctive action—as who that has eyes to see has not read—something not only of the "joy of things to be," but the delights of things that are now present. He saw that out of the abundance of the heart the mouth speaketh; and what is more natural than that the mother's feeling should express itself in songs to and about her baby? Thru her response to his babblings, as Dr. Dewey has said, "the child comes to know what these babblings mean; they are transformed into an articulate language, and thus the child is introduced into the consolidated wealth of ideas and emotions which are now summed up in language."

But it may be said that we needed no Froebel to teach this fact; that this playful prattle between mother and child has always been a common thing. Why should it be claimed as a discovery of Froebel's? Why should we say "*Froebel's* Mother Play"? The instinct which prompts it is old; but the *insight* which Froebel would make possible to every mother in this sort of play is something that was little thought of before his day. While on the part of the child the play remains an expression of impulse and activity for its own sake, he declares that the mother should have a broader outlook. Psychology teaches us that sense-impressions do remain, tho the subject of them may be for the time wholly unconscious of them; but when the time comes that sense-impressions are not only *re*ceived, but *per*ceived, the words and tones with which the child is already familiar, because of the many repetitions, are the more easily understood, and are a further help in gaining new words. This is especially true when words are interpreted by the actions, in which a child delights. There comes to him, in due time, a genuinely intelligent association of word and act, of word and object.

If it is the function of the mother to create conditions for "clear thinking, right feeling, and noble doing," then it is most desirable that she keep away from the child "needless imperfections of pronunciation—"those affected reduplications of words," as Mr. Hailmann calls them—which sooner or later come between the child and the situation in which he finds himself. These are all well enough as the child's creations, but are not in place on the part of adults; for they do not help the child in "the completion of himself" to which we have before referred.

Froebel plays with words, as he plays with gesture, form, color, size, etc. There are very few elementary attributes of objects which do not come to the front in the little child's language necessities in play, and Froebel would note all of these, but would conserve the best. He does not want the child enveloped in words, but would develop the child's language by making the very best use of that which he has at his command.

Again, he lends a hand in this way: the child is given certain materials to work and play with; he builds with blocks, plays with balls of various colors, makes things of clay, wood, cardboard, and paper; he paints, draws, weaves, sews, pounds, digs in the dirt and sand; all of these activities and objects have a nomenclature peculiarly their own, and repeated plays with them create the need for numberless nouns and verbs, as well as for complete sentences. Because of the repetitions of the same words with the same playthings, from time to time, the child gains more definite ideas of the relation of the word and the object. I think this is one of the values in limiting, to some extent, the material a child works and plays with. It is not cramping or hampering, because the new creations or combinations continually call for more freedom and more words, as well as a better use of those already at his command.

Another plan of Froebel's growing out of the use of the work and play material is to have the child work occasionally from very definite direction or dictation given by the teacher. Do not be alarmed lest the creativeness of the child will suffer. It is not a one-sided arrangement, for soon, in turn, the teacher becomes pupil, and the *child* is the master-workman, who must now tell definitely what we are to do. This sort of work must fall in with a previously awakened experience, as to position, direction, etc., as well as of other elementary attributes of objects. It must have a "content" that the child himself feels is a "worthy" one, not only for the future, but for the present. No one who has not tried this device knows its real worth as a means of language-teaching. By such an exercise now and then there is formed in the mind, as the goal of the effort, a transparent mental image of the object or activity to which all of the preceding experience belong; and words, as well as things, are made simpler and clearer. This we must remember is only one device. There are times when the child is left wholly to himself — to work out his ideas as best he can; but he certainly needs help in spelling out the fact that experience, either with actions or objects or the words which symbolize them, is a connected process. "The whole vast mystery of life, in all its processes and conditions"— I quote Professor Small again — "confronts the child as really as it does the sage. It is the business of the educator to help the child interpret the part by the whole. Education from the beginning should be an initiation into science, language, philosophy, art, and political action in its largest sense." Therefore, Froebel's aim in each and all of these subjects is one of nurture, a fostering care of that which is best. He does not want the child warped anywhere by habit, by prejudice, or by misunderstanding.

I have only hinted at Froebel's strong feeling for rhythm in language-teaching. He would make it a powerful factor from the nursery song thru the child's whole school life. Because rythmical language is begun instinctively, he claims that it must also become intelligent; and this even before the *words* may be fully understood. He would use song and poetry as a means to the increase of a higher inner life, and he advises the skeptic who questions the value of it to study the child's language simply and naturally, and see how early in the child's simplest expression of feeling he falls into rhythmical speech. A universal and complete plan of education will not leave children to an arbitrary, frivolous whimsicality in any form of expression, but should lead them to understand and appreciate the true products of art, in which is included poetry.

In the chapter on "The School and the Family," in the *Education of Man*, under the heading "Observation of Nature and Surroundings," Froebel begins by having the children name the things nearest to them; then follows a conversation as to the relation of one thing to another: of the furniture of the room to the room itself; of the room to the house; of the house to the premises — the yard, garden, barnyard, etc. He brings in here a most vital truth, viz., that the knowledge of things and words must be consciously *necessary* to the child; and these necessities do spring forth at certain times and in certain places as "buds on the bough of a tree." The teacher is expected to see these requirements almost intuitively, but he must also know how to give to each stage that which the stage demands. He leads the child from the home into the fields, to the things of nature, to river, hills, grass, trees, etc. The animals are noted, and classified according to the child's ability; but the ability is ever increasing. He observes men at different sorts of work, and notes the common features and the ultimate aim. He sees that men live in families, families in larger groups; and finally the child comes back to the home from which he started on his explorations with a larger outlook; and, if he has been rightly led, he has at least a germ of the truth, which is so fundamental in all ethics, that "only as a whole, as a unit, can humanity fully attain the highest and ultimate purpose of human striving." In speaking of the child's language in the relation to all of these observational experiences, Froebel says: "Man's speech should be, as it were, *himself* in its integrity; it should reveal him all-sidedly and become an image of his inner and his outer world."

DISCUSSION

Miss Elizabeth Harrison, Chicago, Ill.—Play and speech are the elements in which the young child lives and by means of which he grows into the deeper significance of life.

By means of play he tries and tests the different properties of the world about him, beginning with his own body. He seizes his toes, stretches out his fingers, rolls, kicks, and, later on, creeps, climbs, walks, runs, jumps, and swims; until, unconsciously, he has obtained a mastery over his own body. At the same time he is being forwarded in his investigations of the outside world. He pushes, pinches, squeezes, rolls, and, if need be, tears to pieces objects about him.

In early childhood he attempts many exercises that result in nothing except a knowledge of the material in hand; as, for example, he fills a box with dirt, empties it out, refills it, and again empties it, anywhere from one to a hundred times; he pours the sand thru his fingers in tireless repetition, throws pebbles into the water, tosses bits of paper out of the window, to the intense satisfaction of his young soul. Later on he builds, molds, paints, saws apart and nails together again, not so much for the sake of the result obtained as to feel his growing power over the material world about him. Playthings made under the greatest effort are soon thrown away, and forgotten.

In his struggle to master language he is doing the opposite thing. He is striving to give his *inner* world to the outer world. In fact, the very word "speech" in primitive tongues signifies to "break oneself." "To utter" means "to outer." Thus thru the very structure of words we have a suggestion of the chief purpose of language. This gives us some idea of its importance as an element of education.

Froebel, the founder of the kindergarten, in stating a general outline of what the education of man should be, gives us the three chief groups of instruction, namely: religion, the natural sciences (including mathematics), language. Writing he would have as the overflow of the full soul. The first general division — religion — he defines as: "the endeavor to raise into a clear knowledge the feeling that the spiritual self of man is one with God, and to realize this unity with God, thus founded upon clear knowledge, and to continue to live in this unity with God, serene and strong in every relation of life."

Concerning natural sciences he speaks thus: "What religion says and expresses, nature says and represents. What the contemplation of God teaches, nature confirms; for nature as well as all existing things is a manifestation, a revelation, of God."

With such a profound and reverent view of religion, and such a devout and loving view of nature, what may we expect to be the definition of language? After showing how the study of religion unifies, in his inner life, man and all created things, and how the study of science individualizes and separates each distinct object in the outside world, Froebel declares that language is the medium by means of which the inner and the outer are joined, the universal and the particular are unified and harmonized, as language is the self-active, outer expression of the inner life.

It has been found to be of the greatest value in hand-work to lead the child to see *form* as organized creation. All natural sciences are organized as soon as sufficient data are obtained for organization. So language can be taught to a young child in a systematic and thoroly organized manner, without in the least interfering with the spontaneous, joyous expression of the inner self. Indeed, a prominent phonographer goes so far as to organize the first baby babblings. We quote his testimony on the subject:

> Probably the author can add nothing here which will make clear the method herein proposed better than a brief recital of his own experience. He is the happy father of *four* children, the oldest of whom is not yet *seven*. Having been a student of phonography, and a great admirer of the art, and with the theory well in mind, he began, without any wisely matured plans, but rather from a sort of instinct as to correct method, to teach his first child, when it had barely passed the cooing stage, to make the elemental sounds, in the order which the science of phonography shows to be that in which the organs of speech adapt themselves with least effort, and which is explained in the text following: Beginning with the vowels—the most easily learned sounds, because unobstructed—he proceeded to the consonants, then the diphthongs, and finally to combinations. This method he pursued with each child, beginning at the age of from twelve to eighteen months, and continuing by easy stages, a lesson of but a few moments at a time, once or twice a day, when the child crawled from its crib to be perched on its father's breast, early in the morning, or in the evening when taken on its father's knee. The result was simply astonishing. So correct was the articulation and so accurate the ear in the catching of sounds that at three years of age the child's capacity to talk scarcely ever escaped comment. The contrast with children who had learned to talk in the ordinary haphazard manner was truly painful. At eight years of age other children were observed to mouth and swallow their words, to lisp, or to give the impression that their speech was obstructed as by a mouthful of mush.

No words can be too strong for the denunciation of the senseless "baby-talk" indulged in by so many fond but selfish mothers. Consider that method as being used in teaching a foreigner our language, and the senselessness of it becomes apparent without further argument. One of the self-evident values of the kindergarten is the fact that in it the child not only learns to connect the object or action with the word all unconsciously, but also because in a scientific kindergarten both the objects used and the activities taught are *typical*, and the properties of matter as well as the forms of motion are the essential ones.

Thus the child learns fundamental words, definite and strong contrasts, leaving the finer shades of meaning for a later stage of growth. Not only are the descriptive words thus vividly taught, but the constant commingling with children of his own age causes a child to express himself more freely to his small comrade and in simple, childlike language. The songs, stories, and pictures, also, are so selected as to call forth mental images that a child can easily grasp and retain. But above all the ideals that are awakened within his young soul *demand* expression, and in the enthusiasm over what is to him a beautiful thought the child forgets his outer self and its limitations and "outers," or utters, his inmost self. This is the true source of all the truly free and noble use of language, and insures the individual style of expression even in a young child, while at the same time calling for clear and definite language.

But above all things else this early and easy mastery of words thru the direct connection of them with the objects, activities, or relationships they represent brings with it the vividness and strength of mental imagery. This enables the mind the more readily to transfer a word from a purely sensuous meaning to a spiritual meaning, and thereby to *transfigure* the common speech until soul can speak to soul. Thus the highest office of language is obtained.

Mrs. J. N. Crouse, Kindergarten College, Chicago, Ill.—No class of educators who heard Dr. Butler last evening can appreciate more fully or make more practical his suggestions, especially along the line of the study of the Bible, than the kindergartners; not for religious or moral training, but as a study of language and literature. God dealt with the Jewish people in true kindergarten fashion. He taught the meaning of ideas and language thru sense-impression and object-teaching. The Bible, especially Leviticus, Deuteronomy, and the Psalms, are full of clear, concise descriptions, strong and mighty expressions. How did these early nations so master language as to have thus expressed themselves? These child races must have had sense-impressions, clear and definite. We find such expressions as "riding on the wings of a storm," "mountain calls unto mountain." God gave them a long series of discipline to teach them the meaning of the word "holy," as is shown in the way the Temple was divided and animals chosen for food. We are doing the same thing — teaching long and short, high and low, by use of words in connection with things, and leading to the transfer from the physical meaning to the spiritual meaning. It was by these methods that the Jews gained such wonderful mastery of language.

Children are so shut up within themselves, and feel so much more than they can express. I had a boy who was in this condition. I consulted a kindergartner about him; her advice was that he be given means of self-expression. He was to be given opportunities for singing, dancing, drawing, exchange of thoughts and feelings with his fellows. Within six months he was a changed boy. The trouble is that children are not trained right at school.

Miss Ada Van Stone Harris, supervisor of kindergarten and primary work, Rochester, N. Y.—I wish to emphasize all that has been said, especially with regard to placing children in contact with each other for the purpose of developing language. It has been my pleasure to work with all classes, rich and poor, all nationalities, and I know from experience the great good that comes from this association one with another. It is, however, necessary for the kindergartner to be ever alert in correcting all the inaccuracies of the foreign and the English-speaking children. I have known very timid children and defectives to develop marvelously by their association with other children. It is a great mistake to keep children aloof from companions. It is better for children to be in a kindergarten of from twenty-five to thirty than to be in one of from six to eight members. There is value in numbers, for they gain in power of expression from this contact with their playmates.

We had confirmation of this in the case of a child of deaf-mute parents, who was supposed himself to be deaf-mute. In one year he talked freely and expressed himself well. He was timid and reticent with the kindergartner, but when left with the others he unfolded spontaneously.

Miss O'Grady.—I wish to emphasize the value of the child imitating other children rather than his elders, which Miss Harris has illustrated.

Miss Minerva S. Jourdan, *Kindergarten Magazine*, Chicago.—With language, expression and representation of the internal begin. The inner being tries to make itself known; the child begins to talk as he uses his arms or feet; and he knows language only as another part of his body, like arms, feet, etc.

Speech comes because of change in the nervous system; his babblings are the beginnings of self-active outward expression; his beginnings, like all primitive language, are rhythmic expressions.

If a child was left alone, he would invent a language, tho it would be limited. If he finds himself understood, he adopts words, and it requires no effort to remember new ones. Children, it is said, seldom lack for words, especially from three to twelve years of age. If they know a *thing*, they know a word for it. A child pronounces by imitation, but uses his words for the meaning in them. From the very first we should take more pains with the cultivation of his language in his earliest years, that he may not need so many years of correction later.

After one-fourth of public-school life is spent in the study of grammar, do we see evidence of more ease in speaking or writing? Froebel says:

> Language represents unity of all diversity, the inner living connection of all things, and as religion manifests being, and nature, energy, language manifests life as such and as a whole; it unites mind and the outer world. . . . . It is the expression of the human mind as nature expresses the divine. Man's speech will become an image of man's inner and outer world.

Mrs. Putnam has shown us the value of the mother's response; also the value of the society of children to the child as an aid in language; but what is the remedy for the children in the mass, as in asylums? Can anyone offer suggestions?

Miss O'Grady.—There is an interesting experiment being tried in our orphan asylum in New York, where the children are being separated into small groups in cottages, and the managers plan to put kindergartners in charge of each as house mothers.

Mrs. Alice H. Putnam gave an experience in Hull House, Chicago, where the children were kept in the nursery by themselves, with no one to guide their play. They were from fifteen months to two years of age. A kindergartner was engaged to go and live with the children an hour each morning and afternoon. A marvelous difference was soon seen in the children, and before entrance to the kindergarten they all showed marked increase of ability in the use of language.

Miss Sarah C. Brooks, supervisor of kindergarten and primary grades, St. Paul Minn.—In a kindergarten not ten miles from Minneapolis, I know of a young man five years of age who, for several mornings, regularly made requests for the "nigger song." The kindergartners ignored his question for some time, but finally asked what he meant. "Why, don't you know, that song we sang the other day (Decoration Day), 'Colored boy, colored boy, where are you going?'" It was a revelation to the teacher.

How important that teachers of young children should enunciate clearly! With the kindergarten and the first-grade teacher more attention should be paid to the way in which things are said and how they are received. She should have a knowledge of the vocal organs and how sounds are made, especially when working with the children of our foreign population, in whose homes only the mother-tongue is spoken.

Language-teaching in the kindergarten should be given careful attention. The kindergarten itself is coming to be more and more a part of our educational institutions. The problem of a part is a problem of the whole.

When the kindergarten was first introduced into the public schools there was a strong tendency to consider language instruction in the kindergarten a tabooed subject, to be talked of only in whispers. But it has been found by experience that careful attention to language is necessary from the beginning. Language clarifies thought, so far as the child is concerned. To hear the child talk shows us what he understands and helps us to remedy defects in teaching.

The regular work of the kindergarten and the material used afford the means and opportunity for all necessary language exercises — the circle, the gift, the games, the occupations. Miss Adams and Mrs. Putnam have made practical suggestions. I venture a few more. A successful exercise before the work with the gift begins is for the teacher to take a form from the box and say: "Let us have a little game. I shall play first. See how many different things you can do. I have placed my cube under my chair. What have you done with your cube?" Each child racks his brain to think out a new position for the object, and each is eager to describe. This develops originality as well as power of expression.

The number of our stories should be reduced and their language simplified and clarified. There is danger of mental dyspepsia and no language content gained for the child. A less number of stories well told are better than a great number of stories. A frequent retelling of the stories will give power and confidence, and gives an opportunity to draw out the timid children. Call on as many as possible to take part, for sometimes this power awakens late, and it needs discrimination on the part of the teacher to know this. The words of songs should be most carefully learned, for songs learned at this time will never be forgotten. There should be more use made of nursery rhymes, for they serve as a connection between the home and the school, as they are a familiar note in the strange surroundings.

MRS. ALICE W. COOLEY, department of pedagogy, University of North Dakota.—Language has greater significance and application than the dictionary would give. The development of *talk* is not needed in the kindergarten. Language means self-expression in words, in order that one soul may communicate with another soul. The development of the self cannot be separated from the power to give oneself to others; one may not grow without giving. "What God hath joined together let not man put asunder." We cannot get without giving.

What are some of the hindrances? Everything that limits me limits my language, in that it keeps me from expressing myself. The word goes with the impression. Every sense needs training, and where any sense is defective there is confusion of thought. The word must be incidental to the thing and given while the impression is clear. We must be in conscious possession of the word at the right moment. The ear must be trained correctly, that the right meaning may be attached to the words. Let us illustrate. A little boy, whose name was Hallowell, once spent the night with a little friend by the name of Brown. When he knelt by the knee of the playmate's mother he repeated his prayer, very seriously, in this fashion: "Our Father, who art in Heaven, *Brown* be thy name." When he finished, Mrs. Brown said to him: "Why do you say, '*Brown* be thy name?'" "Well, when I'm at home I say 'Hallowell be thy name,' and so when I'm at your house I thought I should say 'Brown be thy name.'"

Every hindrance lies in the self. Anything which makes the child have clear images, think freely, see and link object with word, will clarify thought.

We must give and have ideals, and with that must go the opportunity to give expression to them. This opens the problem of the teacher's needs. There are two ways of looking at this. We may have ideals, but say that, as we can never reach them, there is no use trying. Or, we may have ideals — and none are too high to hold in the soul — and with this goal struggle on to nobler things. There is no end ever reached, and in this is the beauty of teaching, a privilege we share with the mother. All the little things are really great, and mean so much; there is always something to climb toward.

In literature we find the purest ideals of language and the soul. The value of literature should be in the value of the story.

The problem of the kindergarten and primary school are one. I resent the expressions "the kindergarten spirit," "kindergarten thought," for they carry the wrong impression. It all means true spirit of union with the divine, and it makes the true kindergartner or primary teacher, for without that spirit, neither can be true to the best that lies within her and before her. Our spirit and problems are one, the child is one, and our work is one.

THE NEED FOR ENGLISH STUDY BY KINDERGARTEN STUDENTS

MISS MARY C. MAY, DIRECTOR KINDERGARTEN DEPARTMENT, STATE NORMAL SCHOOL, UNIVERSITY OF UTAH

The kindergarten claims the child under six years of age, because it is the time of greatest plasticity, the easiest in which to make impressions. Habits are forming and opinions being molded, many of them for life.

Brain-centers are rapidly setting up connections, making it possible for it to act as a whole, and tending to establish that automatic action which makes for progress and intellectual growth. Our responsibilities are in direct relation to the plasticity and rapidity of growth in the child mind at this period. The imitative instinct is at flood-tide, and our language, manners, mannerisms, and opinions are copied and quoted as final authority. If the pattern set be good, so much the better, but if not, the result is unfortunate.

President Eliot says that "the power to understand rightly and use critically the mother-tongue is the flower of all education." Very few reach this perfection, but are we as teachers endeavoring to approach it, even from afar off? What is required of us?

First of all, the teacher should be able to speak correctly, in the matters of both grammar and pronunciation. She cannot allow herself the luxury of slang, vulgarisms, or colloquialisms, and her words must be chosen with elegance, simplicity, precision, and strength. She should cultivate a richness of vocabulary that will assist in a wealth of ideas, for a poverty-stricken vocabulary is indicative of barrenness of thought. She must be able to judge of word-values in their relationships, and to select the vital and fundamental, and discard the trivial and transitory. She should be trained in an ability to select from her experiences and knowledge those that bear upon a given point, that her work may be most effective. She should cultivate the power of using comparison and simile, that her fund of illustration and explanation may be enriched; should have a keen ear for inaccuracies; and should study the best ways of correcting them. With this should go a trained literary sense. The teacher is a teller of stories and a singer of songs. Thru these means she can introduce the child into the world of myth and poetry. The markets are flooded today with trashy story- and song-books. Can she protect and guide these impressionable minds if she does not know herself the difference between the fine and classic, the cheap and meretricious?

Here are some of our opportunities. Can our students meet the requirements? They are coming to us more and more from well-bred, well-educated families, and our preparatory standards are constantly being raised. Even so we still meet with insufficient preparation and conspicuous lack along the lines of correctness and ease in speech and writing, power of analysis, and selective insight.

A part of the difficulty may lie with the home. Correct habits of speech can best be learned there, and it is only thru constantly hearing the mother-tongue correctly used that such habits become second nature. But a large share of the training in English is given over to the school. When we consider the proportion of time which it uses in instruction in reading, writing, grammar, and literature, how can we account for such mistakes and nonsense as these quoted examples show?

If a child be of a *designing* nature, this should be encouraged thru drawing and paper work.

The mind is developed from *definite* to *indefinite*, from *indefinite* to *definite*. Froebel also took his gifts in the same way, according to the law of progression.

The child under six uses language in its primary function as a medium of communication. It is a social thing by which he exchanges with his fellows his thoughts, feelings, and experiences. He has something to say, and says it in the most forcible manner at his command. He chatters constantly and is only hampered by his ignorance of idiom and his lack of vocabulary. These hindrances do not daunt him. He constructs his idiom as he goes along, and coins his words with ease. There is constant contact with realities, and so his speech is vital, picturesque, and often poetic. He "hatchets" his wood and "needles" his sewing. His nouns and verbs are descriptive of activities and qualities, and most expressive. They show the trend of his greatest interests.

Follow him on thru his school life. It becomes increasingly difficult to get him to express himself orally or in writing. He has sunk to the level of having to say something. As he goes on, all sorts of devices are used to take the place of the free, spontaneous expression that ought never to have been lost. Somewhere a great wrong has been done him. Conscientious work is done in English, and plenty of it, but it must lack that vitalizing spark which inspires elegance, spontaneity, and originality, or this discussion would not be necessary.

The fault must lie largely with the primary and secondary schools. It may be that technical grammar is put into the grades too soon. It is conceded by the authorities that "the science of grammar is of no value in bringing pupils to correct habits of speech. All it can do is to help to training in thought." The only way in which the idiom of any language can be freely used is thru the cultivation of the ear. There must be auditory images which tell us how a sentence will sound before it is uttered. With this there must go motor images to help in the utterance. Here is one of the fatal weaknesses of the English work. There is plenty of grammar and syntax; the classics are dissected and mutilated to find the construction, and perchance from the fragments some beauty of thought and expression. There is work in the critical estimate of the masters of style, but little to bring out spontaneous expression, orally or in writing; and more to check it. Our students may speak and write grammatically, but they have little vital comprehension or originality. They *say* they understand, but alas! they cannot express. For my part, I believe that understanding without expression is a "sounding brass and a tinkling cymbal." If we really comprehend, we can give it back again.

Whatever theory may be advanced as to the cause of the trouble, there is no doubt of its existence. The next point is: What is the remedy? Let us ask ourselves a searching question. Are we as training teachers above reproach in our use of English? Above all, are we simple in our exposition of Froebel's philosophy? Do we gauge our power by the number of high-sounding phrases to which we can give utterance, or by our ability to say great things in a simple fashion? One of the chief evidences of greatness, next to his modesty, of one of the greatest philosophers of today, Dr. John Dewey, is his power to say profound things in so simple a way that the adult mind can understand them, even if there has been no special preparation in psychology and pedagogy. Yet they contain food for thought for the wisest and most learned. Is there not here a suggestion for us and for our students?

It is evident that we must supplement the work done in English in the grades below the normal school. Our first and greatest need is for more training in oral expression. Written language is not the chief end of man; the use of oral language exceeds that of written fifty to one, and it often happens that the student who can write fairly well cannot speak with correctness and ease.

Could not the class work sometimes be so subdivided topically that, while each student studies the whole, she will also be responsible for a clear, logical statement of her own topic? The basis on which work should be judged should be simplicity, a grasp of the subject-matter, and a growing power of expression.

There should be frequent opportunities for telling stories, both to the children and in class. There should be training in the power to judge of the literary quality, dramatic force, and ethical value of the story, as well as in the choice of material and power to adapt. Enough practice in telling should be given until grace, unconsciousness, sparkle, and elegance combine to make the whole. There can also be practice in writing stories, but I confess to a hesitancy in the *use* of the immature story written by the novice. It may be good practice in English, but it usually lacks the virility that makes for life, as is shown in myth and folklore.

Frequently a great amount of written work is required as a review or summary. Cannot a part of this be done orally? I recognize the difficulty when we are dealing with large classes. On the other hand, when our students leave us, they are frequently asked to state their position as kindergartners, and to give a reason for the faith that is in them. How many can in clear, forceful statements convince a doubting school board that the kindergarten is the beginning of the "plan of salvation;" the mothers that it is not a day nursery, but a place for soul culture, mental development, and physical growth? Should we not, therefore, definitely prepare for this work, and require brief, pointed, correct oral statements that will epitomize the class work?

Any work can be much strengthened by the use of illustration, and we should train in a greater wealth of comparison, drawn from life, from the physical and human side, and from nature. This would not only illuminate the statements, but would give a deeper insight into life, and an understanding of its laws, and make clear and vivid the ideas.

There should be more giving of plays in class by students, and less by teachers. Conditions should be given for the students unaided to work out the forms, introductions, and conduct of the play from start to finish. This should be followed by a critical estimate of the play on whatever basis of criticism the teacher deems most vital; but the aim should be to select and judge of essentials and nonessentials. It should be a cutting down into the core of the matter, to discover the weakness or strength of the work, and to give the reasons for either.

One means of training is in the mothers' meeting. To explain to untrained mothers the philosophy of Froebel, to help them to an understanding of their children's natures, on the basis of pedagogy and commonsense, all in words of one syllable, is a most excellent way of discovering if the teachers themselves know what they are talking about.

Another suggestion is for the students to make character studies of different children, to be given orally before the class, using their pedagogy as a touchstone to reveal the springs of character and action.

To summarize briefly: The greatest lack seems to be a low power of expression, especially in oral work; poor spelling and construction; an inability to grasp the vital points; lack of appreciation of values; and rambling, scattering statements.

The greatest needs, then, are: A marked extension of oral combined with written work; deliberately planned training in making clear, definite, brief, and correct statements; simplicity of expression on the part of both trainer and trained; greater power of illustration; and more use of simile and metaphor.

DEPARTMENT OF ELEMENTARY EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—THURSDAY, JULY 10, 1902

The joint session of the Elementary and Kindergarten sections was held in the First Congregational Church at 2:30 P. M., Superintendent R. A. Ogg, president of the Elementary Section, presiding.

Miss Grace Morehouse sang: (*a*) "Every Night;" (*b*) "At Night;" (*c*) "The Swing."

Miss C. Geraldine O'Grady, president of the Kindergarten Section of the National Educational Association, and Mrs. A. H. Putnam, president of the International Kindergarten Association, were invited to the platform.

At the request of President Ogg, a motion was made and carried to appoint a committee on nominations. The following committee was named:

J. W. Carr, of Indiana. Miss Sarah C. Brooks, of Minnesota.
David E. Cloyd, of New York.

The program of the session was as follows:

"Practical Value of Teaching Agriculture in the Public Schools," Joseph Carter, superintendent of schools, Champaign, Ill.

Discussion by Jesse D. Burks, Teachers College, Columbia University, New York; Miss Corinne Marcellus, director of kindergarten, Hartigan School, Chicago; Miss Elizabeth Harrison, principal of Chicago Kindergarten College, Chicago.

The Adams School, grades six to eight, D. H. Painter, director, sang: (*a*) "Soldiers' Chorus from Faust," *Gounod;* (*b*) "Up, Sailor Boy, 'Tis Day," *Bullard:* (*c*) "The Star Spangled Banner." In the last number the great audience joined.

"Myth and History — The Use and Limits of Each," Miss May H. Prentice, teacher of history of education, Normal Training School, Cleveland, O.

Discussion by Miss Stella L. Wood, superintendent of the Kindergarten Normal School, Minneapolis, Minn.

The department adjourned.

SECOND SESSION.—FRIDAY, JULY 11

The meeting was called to order at 2:45 P. M. by President Ogg, and was opened by a song, "Frühlingsstimen (Waljer)" — Strauss, by Miss Harriet Hiscock.

The president announced the intended shortening of the program to one paper and its discussions, as follows:

"The Use and Abuse of Method" — W. A. Millis, superintendent of schools, Crawfordsville, Ind.

Discussion by W. H. Hatch, superintendent of schools, Oak Park, Ill.; D. B. Parkinson, president of Southern Illinois State Normal School, Carbondale; A. W. Rankin, inspector of graded schools, Minneapolis, Minn.; Miss M. Adelaide Holton, Minneapolis, Minn.; Miss Adda P. Wertz, Carbondale, Ill.; Superintendent John E. Richeson, East St. Louis, Ill.; Superintendent E. H. Mark, Louisville, Ky.; Miss Folger, Minneapolis, Minn.; Miss Mosely, Ann Arbor, Mich.; Superintendent J. W. Carr, Anderson, Ind.; A. E. Brown, Sioux City, Ia. The discussion was summarized by President Ogg.

The report of the Committee on Nominations was as follows:

President — Miss M. Adelaide Holton, Minneapolis, Minn.
Vice-President — Frederick Treudley, Athens, O.
Secretary — Miss Adda P. Wertz, Carbondale, Ill.

Upon motion the report as read was received and adopted and the nominees declared duly elected as officers for the ensuing year.

The department then adjourned.

ADDA P. WERTZ, *Secretary.*

PAPERS AND DISCUSSIONS

THE PRACTICAL VALUE OF TEACHING AGRICULTURE IN THE PUBLIC SCHOOLS

JOSEPH CARTER, SUPERINTENDENT OF SCHOOLS, CHAMPAIGN, ILL.

In discussing this topic, only the rural schools and the schools of those villages and towns whose people were farm-reared, and whose interests are still largely agricultural, are considered. In these schools, containing about 70 per cent. of the public-school children of our country, it is believed the teaching of agriculture would be of great practical value.

Perhaps to a considerable part of the remainder agricultural teaching, correlated with nature study, would add to the educational value of nature study by giving it greater definiteness of purpose, but no consideration is given in this paper to that phase of the subject.

AGRICULTURE DEFINED

Agriculture is the art of raising products from the land. Its chief contribution to the wealth and welfare of the world is the production of food—corn and wheat and rice and potatoes from the farm; grapes and berries and melons and beans and radishes, and apples and peaches and pears, from the garden and the orchard; cattle and sheep and swine from the pastures; milk, butter, and cheese from the dairy; eggs and fowls from the poultry yard. Besides food, clothing is a product of agriculture — leather and wool and cotton and silk. To agriculture belongs forestry — the raising of trees to build our houses, make our furniture, adorn our parks, and beautify our homes. To agriculture also belongs floriculture — the growing of plants for their flowers.

Agriculture in its wider sense means not only the production of all these things, but their preparation for the market and the marketing of them. It is both an art and a business. As an art it is probably closely related to a greater number of sciences than any other vocation.

It deals with physics on a hundred lines. Its foundations rest on geology. It depends upon many branches of biology—botany, zoölogy, entomology, and physiology, both of animals and plants. Chemistry does it mighty service. For it climatology must be understood, and bacteriology seems to be at its origin.

IMPORTANCE OF AGRICULTURE

But is agriculture of enough importance to entitle it to a position on our school program? It would be a waste of time to tell this department of the vast importance of agriculture, for all know that thru agriculture the world is fed and clothed. This is the foundation of all prosperity. When the agriculturist prospers, men laugh as they toil, women sing as they work, and happy children grow into robust manhood and womanhood; long railroad trains cross the continent loaded with the products of his labor, and mighty ships plow the briny deep as they carry these products to other lands; when he is prosperous thousands of factories give employment to millions of men whose wages build happy homes and opulent cities. Nor do you need to be told that were our agriculture to fail, were the earth and the air and the sky and the plant and the animals to fail to respond to the skill of the husbandman, the myriad streams of commerce would stop their beneficent flow, ships would rot at their docks, locomotives would rust in their roundhouses, the walls of cities would crumble, and the land become a desert or a wilderness. You know that the world empires have risen only where food and clothing were abundant, and that when these have failed desolation and barbarism have returned to the land. You have heard that the shipment to foreign countries of a thousand millions of dollars worth of agricultural products annually is giving this United States a foremost position among the nations of the earth. This has changed the balance of trade and is giving this nation wealth beyond the dreams of avarice. The greatness of America is in her agriculture.

AGRICULTURAL TEACHING NEEDED

Do you ask, "If we are doing so well, why try to do better? Why teach agriculture in the schools?" History admonishes us to do this. The valley of the Euphrates was once as fertile as any of our lands, but for 2,000 years it has been a desert. The corn of Egypt fed the conquerors of the world, but neglect and ignorance of agriculture brought its husbandmen to the verge of starvation centuries ago. The history of the Aryan race admonishes us to do this. The root of the word "Aryan" is the same as the root of the word "arable"—plowable. We are the race that plows. We soon exhausted the fertility of our Asiatic home and also the soil of the Mediterranean peninsulas—Greece, Italy, and Spain. A few hundred years were ample time for us to make the life of the agriculturist stale and unprofitable in the British Isles. We thrust our plowshares into the rich soil of the valleys of Virginia and the name "planter" became a synonym for "opulence"; but now these lands are too sterile to repay cultivation. In spite of all his thrift and industry the land of the Yankee has its abandoned farms. In many other states of this, the greatest of all agricultural lands, there are vast areas that yield to the husbandman constantly diminishing returns for his toil. It appears that this Aryan race during the centuries crossed the continents, like a mighty swarm of locusts, alighting on fruitful fields, from which it extracted the fertility, and passed on, leaving poverty and barrenness in its track; or as if it had trod with hot feet across the continents, burning out the fertility of the soil. If the teaching of agriculture can lessen this blighting effect, who can doubt that it should be given in the public schools?

SOIL STERILITY NOT A NECESSARY RESULT OF CULTIVATION

Do you ask, "Is not sterility the inevitable result of cultivation, and of the dwelling of great numbers of people on any land?" Not at all. The plains of China from the early dawn of history have maintained more than one-fourth of all the human beings who dwell upon this globe. And all their food has been produced by the ground upon which they live.

Besides this great example it has also been demonstrated that an ideal system of agriculture maintains itself; that it is able to thrive forever upon the same land, and from its own resources. The land becomes more productive with time, and this without the aid of any fertilizing material except that produced by the land, or with comparatively little else. What could be of greater practical value than to teach to those who are to become the farmers of America this ideal system of agriculture? All over this country, with rare exceptions, agricultural work is carried on in a more or less wasteful, neglectful, and destructive manner. The fertility of the soil, the accumulations of vast periods of time, is being recklessly exhausted—in some places has already been exhausted—by destructive methods. Fungous parasites, through ignorance, are permitted to greatly reduce the yields of our cereals. Insects destructive to fruits and berries are permitted to multiply till those necessities to health which should be for all are only within the reach of the few. Forests that held a rich soil upon the hillsides are destroyed and the soil washed away never to be replaced. Native grasses valuable for grazing are destroyed, and no others can be found to take their places.

A few years ago it was not known how to remedy these and other errors, but recently there have been vast additions to human knowledge along all lines pertaining to agriculture. Probably in no other field of man's endeavor has there been as great progress as here. Experts and students at the various state and United States agricultural experiment stations and in similar institutions in other countries, and thoughtful, patient, and careful men and women in their orchards, dairies, gardens, and homes, have made many discoveries and established many facts which in the aggregate constitute an immense mass of valuable, useful, and interesting knowledge. These facts relate to nearly everything pertaining to household and farm life—the cultivation of various crops, the feeding and care of animals, the destruction of insect enemies, the preservation of insect friends, and the like. These facts are accessible and should be carried to the people. What other or better or more suitable means are there than the public schools? For instance: It is said that the codling moth and the curculio damage our apple crop to the extent of millions and millions of dollars annually, and that, taken at the right time, all this loss can easily be prevented. What could be more practical than to teach the children to destroy these pests? Near by nearly every schoolhouse is an orchard, and a spraying apparatus would cost less and would be quite as educative and as easily manipulated as many of the gimcracks found in some schools.

HIGH PEDAGOGICAL VALUE

No other teaching squares more nicely with accepted pedagogical ideas. It deals with those things with which the farm-reared child is already familiar. It is largely a training of the senses. It enters consciousness by every avenue to the soul—hearing, seeing, tasting, smelling, feeling. It deals with things and not with words alone. It relates to what is near and not to that which is afar. Its lessons are on the lawn, in the treetop, in the shower, and by the roadside. It does not deal with abstractions, but with concrete, living, growing things; with the flowers and plants, and colts, and lambs, and birds that are growing with the child; for *growing together* is the meaning of the word *concrete.*

Agriculture is pre-eminently the study that cultivates the habit of observation, that keeps the pupil on the lookout with his senses wide awake and keen for whatever is presented. It teaches him to see what is worth observing, and not to overvalue what is simply odd or curious. It teaches him that effect follows cause; that we live under a reign of law; that all phenomena have a natural cause; that all things exist for a purpose; and that "Nothing vain nor useless is." It prevents the growth of superstition, and gives freedom from groundless fears and baseless hopes. When studied in garden and field and forest, as of course it should be, agriculture gives full play to all the motor activities.

WILL IMPROVE THE FARMERS

The teaching of agriculture in the rural schools would have its highest value in its effect upon the farmer; for, while it is important to improve the farm, it is more important to improve the farmer. Farmers are more than farms — souls than soils. A fuller knowledge of agriculture would greatly change the farmer. It would broaden his mind and deepen his way of thinking. His vocation would appear to him in a new aspect. Instead of walking blindly among the great forces of nature, as he now too often does — instead of looking upon nature as a great puzzle, that only perplexes, or bewilders, or discourages him — he would see order and beauty and law that would clarify his thinking and encourage and guide him to more successful doing.

Teach the children the lessons of the soil. Tell them the wonderful story of its origin, or, better still, let them tell you what they have seen in the field and by the brook, and then give them the charming explanation. Tell them why men plow and what are the reasons for cultivating the soil, and what methods of cultivation are beneficial and what are decidedly injurious. Tell them how the physical condition of the soil may affect its fertility; and tell them what elements have been taken from the soil when it is worn out, and how to replace them. Tell them the marvelous story of the most important discovery of modern times — a discovery which places in the hands of every farmer a means, completely under his control, of drawing from the atmosphere the free nitrogen of the air, and of fixing it in any field he may wish to enrich. It is a story of minute organisms which are in the soil — or if they are not there the farmer can put them there — which locate themselves upon the roots of certain plants and give these plants power to store up in their roots, to be left in the soil, its most valuable constituent of plant food, nitrogen.

Tell them what the tassel and the silk of the corn are, and why one is at the top of the stalk and the other very much below it. Tell them why the blossoms of corn, oats, rice, and wheat are colorless and odorless, and why the blossoms of cotton and the clovers are so beautifully colored, and why they have such exquisite perfume. Tell them what the bees and the bumblebees are doing, and of what superlative importance they are to the existence of many plants, and how they are most industriously serving man, a little by the honey they make, but vastly more in other ways; for they not only increase his apple, peach, and pear crop, but they also aid in adding fertility to the soil.

In the school garden — for there should be a garden near every school — teach many of those devices by which fruits are propagated, and by which a new and desirable variety is multiplied and distributed. Very few of our most valuable fruits are propagated by seeds; in fact, some are without fertile seeds. There was never but one Brother Jonathan apple tree or Sudduth pear tree growing on its own roots. Explain to the children why the seedsman sells no strawberry seeds. Let the larger pupils understand plant breeding, as of corn, in their garden, and tell them about the efforts being made to produce better — better from a dietary point of view—varieties of cereals, and also more hardy and more fruitful. The possibilities in plant-breeding are just dawning upon the farmer, and are as fascinating to him as are Marconi's discoveries to the telegrapher. Yet there is nothing here that a bright pupil might not apprehend. Nothing at any rate so difficult as the inverted divisor in arithmetic or the passive voice in grammar. Let the children observe how the young things of the farm gain knowledge. The young chick, and the colt, and the lamb, begin with minds all blank, and very rapidly they learn, so that shortly they are quite wise. Let children observe the means by which they gain this wisdom. A setting hen in the schoolroom to hatch her chicks and train them to eat, and to come at her bidding, and to scuttle away and hide when danger comes, would not be a bad beginning for the study of psychology. The successful management of farm animals requires an understanding of this law of their intellectual growth. "*Intellect is the outgrowth from the simple reflex response to external conditions.*"

Let the children observe that all young animals upon the farm are at first without fear, and that the emotion of fear comes only to preserve from harm, and that if the young things meet no harm, and early receive kind usage, they will always be without fear. The application of this to the rearing of animals upon the farm will soon make a "happy family" of all. And the resulting kindliness of treatment which will be given to all farm animals will greatly enhance their value—increase the working years of the horse, the richness and the quality of milk from the cow, the rapidity with which weight on the fatting animals accumulates, and add greatly to the pleasure and the profit of those engaged in animal husbandry.

Who can doubt the practical value of teaching these things to those who are to be the future farmers of this land? Think how it would brighten the dull monotony of the lonesome little country school to teach the children to understand the things about them—the weeds by the roadside and the harm they do; the birds in the hedge and the good they do; the honey bee and the white clover, the bumblebee and the red clover, and the great value of the work they accomplish; the angleworm in the field and its work. These things for the child, and more complex things for the young man and the young woman of the farm, how they would change the mental and spiritual attitude of the future farmer toward his vocation! Instead of being either the discontented drudge longing to get to town, as he so often is, or of being the hard-fisted, grasping land-grabber, which some, alas, are, he would be a student working joyously and happily and successfully in that greatest of all laboratories—a well-kept farm.

DISCUSSION

JESSE D. BURKS, assistant, department of Elementary Education, Teachers College, Columbia University, New York.— The paper that has just been read may be summarized under four propositions: First, agriculture as a vocation is of fundamental importance in our national economy; second, there is pressing need for improved methods in agriculture; third, the subject-matter of agriculture may be organized on educational principles; fourth, there is a richness of subject-matter adapted to the increase of culture among the farming population.

The point of view here is that of the vocation. The thought is focused on a distinct industrial class. The practical value of the teaching of agriculture is said to lie in the economic betterment of the country and in the intellectual enlightenment of the farmers.

There is much soundness in this argument for the practical value of teaching agriculture in the public elementary schools, tho it is doubtful whether technical instruction in agricultural methods can be carried as far as proposed in the paper. I shall not attempt a discussion of this phase of the question, but shall pass immediately to the consideration of a far more significant problem, namely, what is the most fundamental and permanent value of teaching this subject in the public schools?

The answer to this question will vary according to the standard by which we measure the practical value. Mr. Carter has found his standard in the economic and intellectual welfare of the farming class, and has made his answer to accord with his standard. We might make an estimate of value upon a standard primarily financial, or strictly disciplinary, or upon a standard involving moral development in a narrow sense. Each of these standards has rightful claim to consideration, but each is inadequate. Evidently, we are compelled to face the problem of an ultimate educational standard before we can make an estimate of value that shall be full and final.

We find such a standard by considering what is most characteristically and truly human, and therefore most vitally and permanently valuable. It is a truism as old at least as Aristotle that man is by nature a social being. In our educational thought and practice we have, in a large measure, forgotten this important fact, and have gone far toward desocializing the school. The subjects of our curricula are far too commonly treated as if they were independent of human life. Geography and history and nature study are taught, not because they reveal significant aspects of social life, but because they are, for some mysterious reason, considered from our adult point of view as necessary for the mental training of children.

There is, however, a distinct turn in the tide. The truism above referred to, expanded and vitalized, embodies the best educational thought of the past twenty years. Thus amplified, the phrase means that the chief business of education is to lead children into a sympathetic understanding of the great body of social relations that constitute the significant part of human life, and to develop capacity to control these relations. The affairs of family and neighborhood life; of commercial activity; of city, state, and national politics; the moral, economic, and political relations of man to man; the finer social relations expressed in literature and art — these are the realities with which education is properly concerned.

Geography is valuable, from this point of view, only so far as it enables us to understand and to control the physical background of social life. A geographical fact has social value when it determines to some extent social relations, such as habitation, industry, or political unity. Arithmetic possesses value, in a social sense, only when it enables us to gain a clearer vision of human relations, or to control more readily the affairs of social life. Just so any other subject must establish its right to a place in the public schools by showing that it can clarify the social understanding, stimulate the social sympathy, and increase the social vitality of the pupils. The final measure of educational value, then, is *social power*, which embraces *social sense*, or the capacity to comprehend social situations; *social sympathy*, or the capacity to feel social situations; and *social efficiency*, or the capacity to control these situations.

Let us apply this standard to such nature study as we commonly find in our elementary schools. This consists of a somewhat orderly arrangement of facts concerning the physical world, without much regard to their relative importance—facts about plants and animals and the inorganic world, brought together with little thought of their human setting. The germination of seeds, the growth of plants, the habits of animals, the effects of soil, temperature, and moisture upon plant life, are taught, and collections of various kinds are made without reference to the part these things play in determining human relations. There may be interest in such work, but there is not social interest. We have only a sort of educational solitaire, in which the characteristically human touch is lacking. Social power cannot be developed by such processes.

Agriculture properly taught furnishes a social background for much that is going on under the name of nature study. The germination of seeds, the growth of plants, the collection of specimens, the observation and classification of plants and animals, lose their isolation and assume a vital social value. Nature study thus becomes less theoretic and abstract; more practical and concrete. The facts regarding plants and animals, soil and climate, form parts of a story that has meaning and motive, and the interest centers itself upon large, rich thoughts rather than upon details, in themselves unimportant. Mr. Carter has presented a suggestive body of matter appropriate to such study, which I need not dwell upon at further length.

Judged by our social standard, the educational importance of facts depends upon the extent to which social relations are determined by those facts. The final thought that I shall advance is that agriculture, as the largest single industry of our economic system, is one of the most powerful factors in determining human relations. The leader in this discussion has brought out, in many of its details, the social bearing of the subject, but has failed to carry out the thought to its conclusion. The field for the teaching of agriculture must not be limited to the rural schools, but must be extended to all schools, city and rural alike. The subject has a practical value, if the standard I have suggested be accepted, far more fundamental than that advanced in the leading paper. The teaching of agriculture is not only practically valuable, but is practically necessary in a school that aims to bring its pupils to a vivid comprehension of their social background and to develop in them an habitual attitude that prompts them to measure their individual powers by the standard of social efficiency. The requirements of enlightened citizenship, then, are the highest justification of the teaching of agriculture in the public schools.

MISS CORINNE MARCELLUS, director of the kindergarten, Hartigan School, Chicago, Ill.—I think we shall all agree that gardening has great educational value even for the very young children, but I am sure we shall be unanimous in saying that it presents huge difficulties in most of our school environments; so, rather than theorize, I will tell you a little of what has been accomplished in some Chicago schools.

That a practical and successful garden can be planned and cultivated in connection with a public school kindergarten seems to have been fully demonstrated by the teachers and children of the D. S. Wentworth School, furnishing at the same time a very remarkable example of "where there's a will there's a way." To begin with, they felt strongly the value of gardening, and having once made up their minds that a garden was the thing to have, they compelled circumstances to shape themselves to that end.

Of course the first requisite, and also the first difficulty which confronted them, was to get a piece of old mother earth large enough for their purpose. For a time this was so serious a problem that it seemed as tho their hopes must be abandoned, and then I think they reasoned that the lack of anything so plentiful as *dirt* in a Chicago kindergarten district should not deter them. There was no school yard, and a vacant lot near by which might have been secured had no fence, so they set to work investigating the cost of fences. By strict economy and good management they found they could fence in that lot for $150, but as this seemed to necessitate a cut in salaries it was deemed unadvisable. Then they appealed to the mothers, with the result that one mother, the fortunate possessor of some ground, loaned them a garden 25 x 50 feet. Next came the thoro preparation of the teacher herself for the work, and this was accomplished by consulting all the garden lore of the Chicago Public Library and by the giving up of many afternoons in study.

Then began the actual work, which was done entirely by the children. They were divided into two groups of about twenty-five each, each group working a while every day. The ground had to be cleaned of all rubbish and cornstalks left from last year, and a glorious bonfire celebrated its completion. The children all accompanied the director to engage a plowman, who gave his services for one dollar, and such fun as it was to follow the plow, and such mysteries of squirming worms, bugs, and stones as it unearthed. It was then platted into beds, the children using strings to make the paths straight. At last the garden was ready for planting. The children brought many kinds of seeds. Of the flowers the nasturtiums were found the most successful. The pansies were not a success, but no fault could be found with the morning-glory vine which covered an unsightly fence. Radishes, lettuce, cabbage, onions, and potatoes were planted in other beds, and the children were very much surprised at the cutting up of the potatoes in planting. Sweet corn and popcorn were planted, and as no cornfield was ever complete without big, yellow pumpkins, these were not omitted.

In due time the tiny plants appeared and the results in the child garden were no less apparent; never once had the children been told to keep off the grass in the surrounding yard or reminded in their care of the garden. They marched from the school to the garden in an orderly line, but then were allowed to work informally, and the question of discipline solved itself. Many were the surprises for those whose experience had never gone beyond the barrel in the grocery store.

The radishes and lettuce matured before the close of school, and a party celebrated the occasion. The next unique feature was a sale. Dainty invitations made by the children were sent to the mothers, and no regrets were received. On the auspicious day many little storekeepers with their check-books stood behind tables filled with bright radishes and green lettuce, and sufficient money was taken in to buy a beautiful picture for the kindergarten. During the summer the garden was cared for by the director and neighboring children, and in the fall they reaped a glorious harvest. There were six perfect ears of popcorn which decorated the Christmas tree; a long sunflower stalk for a flagstaff; another sale of vegetables; a Thanksgiving party in which another kindergarten participated; gourds for decorations; and many seeds put away for next season. It was an abundant harvest in more ways than one, and I think those who planned and directed and made possible this harvest must have also received their full share.

In the next instance, the Burr School, the whole school participated. A vacant lot 348 X 158 feet was loaned, divided into beds, and each room in the primary given a bed. Vegetables and grains only were planted, and the children worked half an hour each day under the supervision of a teacher. The grammer grades were given seeds with instructions for home window-boxes and flower-beds, and prizes were offered for the best results in the fall.

In the interest of this subject, I visited many schools which have done successful gardening, and in each case I found success due to personal effort on the part of the teacher. If our system of education can be said to be superficial, is it not due to our inability to show the child the connection between cause and effect? He learns about things, but does he come in contact with the process of their creation? Can we develop logical thought without showing him this process, especially with our younger children? And what more beautiful or natural way can we find than thru nature herself? Is it not worth a strenuous effort on our part? I believe we can overcome all the difficulties of environment and methods if we are earnest and willing to work, and I know the harvest will not be alone that which the earth yields, for there will be harvests of mind and spirit. There is no study in our curriculum which cannot be correlated with this subject, and the principles of evolution drawn from this experience and applied to other subject-matter will put new life into the school routine, and education will become a more natural process.

MISS ELIZABETH HARRISON, principal of the Chicago Kindergarten College.—If the steadily increasing demand for gardens in connection with schools is any evidence of their value, we have but to turn to that most convincing of all arguments, namely, the statistics of the subject. In Europe there are over 100,000 school gardens, not including the more or less extensive patch of ground that is a part of every kindergarten on the continent.

I have not been able to obtain the exact statistics concerning the number of American schools that have gardens as part of their scheme of work; but they are far behind Europe in this respect. Our kindergartens, on the one hand, and our state agricultural schools on the other, are doing much to increase interest in this important subject.

The former, the kindergartens, aim only at teaching the love of plant life and a tender protecting care of the same, the names and the general characteristics of the special plants cultivated being incidental to the awakening of the right interest in nature and the development of the right will power in the treatment of plants, shrubs, and trees. The latter, the state agricultural schools, train their students into a scientific knowledge of agriculture, together with practical experience in gardening, farming, horticulture, and to a certain extent forestry.

Between these two extremes lie the elementary schools, the secondary schools, the high schools, and the normal schools, where the work is as yet largely in the experimental stage, with a few brilliant exceptions.

It is not in my province, in the brief time alloted to me, to speak of the common-sense argument for a knowledge of gardening as an important part of each child's education, inasmuch as the earth is not only his home, but the producer of all of the food that he eats and of much of the clothing that he wears, not to speak of the practical economy that arises from knowing how to make a few feet of earth bring forth a sufficient living for two or three people, with a small addition of meat, butter, milk, etc. I am personally acquainted with a man who by the scientific gardening of fifteen acres has maintained a family of five and saved money enough to give a college education to each of his four boys. This is but one illustration of the economical value of a knowledge of gardening. Nor have I time to discuss the moral influence which is created by teaching boys to love to work in a garden rather than to loaf on the streets or congregate in the back alleys.

I have an intimate friend whose life work has been the tutoring of boys preparatory to their entrance to college. His home is in one of the finest suburbs of Chicago, and upon his grounds are beautiful trees and shrubs and well laid out gardens. He states that without exception he has had to teach each city boy who has come to him a respect for nature; that invariably they begin by pulling the branches off of the shrubs, whittling the trunks of the trees, and ruthlessly tramping down the gardens in their heedless play; that in each case he has cured this vandalism by giving the boy a plot of ground of his own to cultivate, and leading him little by little to see the wonder, and then the beauty, of the great world about him. The boys were not "the roughs" of our city, but came from cultivated homes. The fact that they had had little or no direct contact with nature had left them still in the savage attitude toward nature, namely, that of *mastering* her by destroying her.

This brings us to the practical value of gardening as it is used by the kindergarten. The young child who comes to our kindergarten is largely in the emotional stage of development. Therefore, it can readily be seen that it is an important thing to educate his affection for plant life, to lead him to feel that it is a part of the same divine, mysterious creation of which he is a part, in order that *reverence*, that deepest of all emotions may be stirred within him. No one who has ever watched the glow on a child's face when he first discovers the cotyledons that have mysteriously appeared where *he* planted the seed, or who has seen the light that shines in his eyes when he carefully plucks for the first time a blossom from *his* plant, can doubt the soul stirring which such an experience gives. But the garden of a kindergarten does much more than this. The children are taught that it is part of their daily life to water and care for the plants of their schoolroom, or school garden. Thus a sense of loving responsibility is awakened and strengthened as the year goes forward. Surely the Lord knew best when he placed man and woman in a garden for their development, and, having failed to profit by their environment, condemned them to till the soil. The race instinct which created this great world-enduring mythus was a true one, and we will do well to follow it.

THE USE AND DANGER OF METHOD

W. A. MILLIS, SUPERINTENDENT OF CITY SCHOOLS, CRAWFORDSVILLE, IND.

Education is a process. There are several agencies employed in bringing about this process. One of these is inspiration, or suggestion. Thru this channel the spirit of a people is communicated from generation to generation. The hopes, aspirations, ambitions, viewpoints, and insights of an individual or a nation are largely received thru "the hem of the garment." What are known as the spirit of the age, the genius of a people, the atmosphere of a school, are communicated chiefly thru the suggestions that come out of personal contact. The inspiration of the ancient prophets was not an exceptional phenomenon, but a notable instance of a prominent universal element in the educational movement. A second factor is imitation. While the individual acquires the inner content of life from those about him thru suggestion or inspiration, he secures the forms of life for the clothing and expression of spirit by appropriation of the forms and usages in vogue in his environment. By means of this appropriation, or imitation, he acquires his dress, manners, language, institutions, and the character of his occupation. Infrequently suggestion and imitation combine to make him inventive of a new form or institution.

These elements, suggestion, imitation, and invention, proceed out of the constitution of the individual and his reaction upon the environment with which he comes into contact. These processes are elemental and constitute the chief factors in the educational process, but if the individual were left to the development coming solely from the experience growing out of associations which his own impulses would secure, the results would be uncertain. There would be a large margin of chance, his development would be both slow and imperfect, and inadequate to the demands made upon his adult life. Society, therefore, supplements the native educational process by bringing to bear an institutional agency, teaching.

Education is a process, a movement in the life of an individual. Teaching is an art employed in facilitating and directing this process or movement along lines believed to be most wholesome. This process is according to certain laws, a part of which are inherent in the nature of human life, and a part of which are inherent in the nature of human environment. If the individual is to experience the educational movement, he must pass thru certain activities determined in his own nature. He must also pass thru a certain order or sequence of activities determined by the nature of the environment with which he seeks to come into adjustment. These activities required of him as a means of growth, these conditions imposed upon him, constitute what we call the "principles of education." They are also referred to us as the "method of education," as distinguished from the "art of teaching." The nature and sequence of activity determined by the nature of the individual are sometimes referred to as "subjective method," while the sequence imposed by the object of mastery or appropriation constitutes "objective method." Another phrasing connoting the same distinctions is the method in the individual and the method in the subject.

Now, teaching is an art or practice, in the sense in which we speak of the practice of law or the practice of medicine, and has for its purpose to facilitate the educational activities of the child. To be effective it must conform to the principles or laws of the process which we denominate "method of education." It must keep within the limits which these principles impose. In so far as it goes beyond these limits or fails to conform to these principles the practice becomes ineffective and futile. But the art of teaching may have great liberty within the limits set by the principles of education. A principle of action does not define the whole of the practice pursued in conformity therewith. It merely defines certain conditions which the practice must satisfy as the price of success. It is a common divisor rather than a multiple. Art deals with a particular set of conditions. Principle has to do with a general characteristic applicable to all situations. Educational method sets up the general course, the guiding lines of practice. After satisfying these conditions the art of teaching is subject to a law of its own, and, practically, this is the law of efficiency.

It is evident that the school as an institution for teaching must have a definite methodology if it (*a*) is to accomplish the end it has in view, and if it (*b*) is to accomplish this end with economy of time and effort, both of which are important considerations. The school must have both a clear working conception of educational principles and a definite code of practice. The teacher must have an adequate grounding in the laws which govern her profession, and at the same time possess definite methods of teaching — a definite plan of procedure.

What use shall the teacher make of method? In the first place she must understand and keep constantly in mind the nature and sequence of experiences made necessary in the nature of child life thru which the educational movement takes place. She must understand subjective method. She must also understand the sequence of these experiences made necessary in the organization of the subjects of study and practice upon which the child is put to work. She must understand the objective method. She must grasp the principles involved in these conditions in order to know what her practice must conform to; to know what her limits are; to have a guiding line for the definition of her procedure in the class-room. The teacher must understand the fundamental principles of education in order to be independent, in order to be helpfully self-critical. However efficient she may be, however great her experience, or fortunate her instinct for the right thing to do, she is dependent upon the insight of a supervisor to know whether she is doing the right thing, or doing it in the right way, if she is not grounded in correct pedagogical insight. Without at least an elementary pedagogy she has no compass. Her art is chartless. She is navigating the sea of school-room problems hit or miss, unable to know for herself just where she is or the worth of what she is doing, except as she hails a passing friend equipped with both chart and compass. Her teaching must be blind, hesitating, faltering, feeling its way, unless she is prepared to measure the worth of what she is doing, find her distance, take her soundings, and locate the channel thru which she may safely approach. The efficient teacher will not, does not, and cannot develop her art of teaching out of the body of principles by which she is governed. Teaching is not applied pedagogy. Art grows; science is elaborated. Art is subordinate to science only in the sense that it must conform to the standards set up by science. Each rests upon its own foundation and has its particular field and law. Art has generally preceded science in time of development. There was an art of teaching before there was a psychology, or a science of education, just as there was a literary art before there was a science of discourse. Art is born and is "long." The function of science is, not to give birth to art, but rather to determine whether it is well born and to shorten it. The admonition of Professor James in discussing the relation of psychology to teaching in his "Talk to Teachers," is timely and in point. I quote the following:

> I say, moreover, that you make a great, a very great, mistake, if you think that psychology, being the science of the mind's laws, is something from which you can deduce definite programs, and schemes, and methods of instruction for immediate school-room use. Psychology is a science, and teaching is an art; and sciences never generate arts directly out of themselves. An intermediary inventive mind must make the application, by using its originality.
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> The science of logic never made a man reason rightly, and the science of ethics (if there be such a thing) never made a man behave rightly. The most such sciences can do is to help us to catch ourselves up and check ourselves, if we start to reason and behave

wrongly, and to criticise ourselves more articulately after we have made mistakes. A science only lays down lines within which the rules of art must fall — laws which the follower of the art must not transgress; but what particular thing he shall positively do within those lines is left exclusively to his own genius. One genius will do his work well and succeed in one way, while another succeeds as well quite differently; yet neither will transgress the lines.

The teacher, therefore, will understand the principles of subjective and objective method, not as something out of which she may deduce rules of practice, but as a means of better defining her methods of procedure and of testing the worth of her teaching.

It is necessary also that the teacher have a definite method or code of practice, and that she understand the nature and relation of the elements with which she must work. There are at least four: The end to be accomplished; the condition of the particular child or children to be dealt with; the instrumentalities, subjects, and devices with which they are to be dealt; and the particular teacher, with her own personality, equipment, resources, gifts, and limitations, who is to deal with the children. The thing to do is to be determined from these conditions. Given the conditions, the teacher, keeping in mind the essentials of method, must determine for herself and the particular time and place the plan or practice to be pursued. This plan must be thought out each time. Variation of any element requires a corresponding modification of plan. There is not one method of teaching reading, or number, or science, but as many methods as there are lessons to present. Each lesson requires its own method; each teacher, her method; each child, its method. The actual problem of the teacher is to move the child from where he is found to where he is wanted to be. In the movement the teacher must enjoy and exercise entire liberty in the selection and employment of ways and means, instrumentalities and devices, keeping all the time within the limits fixed by the principles involved in the process. The teacher is given a set of factors with which to work, certain limits within which to keep, and a result to obtain; otherwise she is free. She may be allopathic, homœpathic, eclectic, old school, or new school, always free to do the thing set out to be done in the way which for her is best, always remembering that she herself is the vital factor.

But I am to speak especially of the dangers of method. These have been suggested already in the foregoing. First of all is the danger in our pedagogical thought and practice of confusing method of education with method of teaching. This error occurs in two forms: (*a*) In attempting to deduce the art of teaching directly from the principles of education, putting under the ban all practices of the schoolroom which do not show direct lineage; (*b*) in setting up a particular teacher's art as possessing universal validity, and therefore serving as a criterion by which all teaching shall be measured. The former of these errors is quite common with teachers trained in one variety of normal school, and is one to which professors of pedagogy, normal-school instructors, and supervisors are particularly liable in directing and criticising the practical work of the schoolroom. Examples of this error are the so-called psychologies of language, number, and certain phases of kindergarten work; the attempt to deduce working rules from more or less crudely elaborated generalizations from child study; the attempt to develop finished writers of English prose by a study of the philosophy of style; the organization of certain normal schools in which the training course consists of a few sample lessons given to exploit further the principles dictated in the lecture room. Another instance of this error is the frequent impatience of the critic with the practice of the class-room because he observes there appeals, devices, and methods which are not written down in his philosophy. Quoting again from James:

> The art of teaching grew up in the schoolroom, out of inventiveness and sympathetic concrete observation. Even where (as in the case of Herbart) the advancer of the art was also a psychologist, the pedagogics and psychology ran side by side, and the former was not derived in any sense from the latter. The two were congruent, but neither was subordinate. And so everywhere the teaching must agree with the psychology, but need not necessarily be the only kind of teaching that would so agree; for many diverse methods of teaching may equally well agree with psychological laws.

The second error is quite common with the teacher who is not equipped with a correct philosophy of teaching, or who is enamored with her own success. Examples of this error may be found in many textbooks compiled by teachers who have met with personal success in the use of certain methods of teaching reading, or language, or number, and who assume therefrom that their plans and programs have equal validity for all children and all teachers in all times and places. The same mistake is made by the critic who would or could not follow the program he is criticising.

Another danger in the matter of method, akin to the foregoing, is the very prevalent desire for uniformity of practice. In the state system it takes the form of uniform courses of study and state adoption of textbooks. The error consists in ignoring the variation of communities in character of population, cultural conditions, and school enconomy. In the local system it is quite likely to take the form of uniform methods of government, presentation of lessons, and assignment of instruction. The error here consists in ignoring the variations in the character of the several districts of the city, and especially variation in personality, resources, and equipment of teachers. Each school has the right to do for its pupils that which they most need to have done, and each teacher has the right to do the things to be done in the way which she can best do them.

There is always danger in prescribing programs for teachers of veiling their personality and obstructing their recourse to common-sense. After all, the best which the teacher can give the pupil is herself—her own better insight; her truer aspiration; her juster appreciation; her superior point of view; her personality. It is thru the world dwelling in Christ and Christ dwelling in the world that the gift of redemption is obtained. It is the fertilizing contact of mature with immature spirit that communicates the better life of the one to the other, that lifts the lower to the plane of the higher. The teacher is seen in her truest relation when, like our Savior, with down-stretched hand she projects her own noble and exalted spirit into the being of little children and raises them to her side. This is her greatest contribution, and any hedging the teacher about with fine and exacting prescription of method that hinders or prevents this touch of life upon life is hurtful and to be deplored.

In the effort to make teaching scientific rather than artistic there is also danger of getting in the way of the child. The teacher is not concerned with an inert, formless mass which she is to push and pull and batter into shape. The child is a living, organized being, filled thru and thru with a method of education implanted by a keener insight than man's. He is surcharged with impulses sufficient for his development if proper relations are provided. There is grave danger in minute definition of plans and procedures of thwarting his spontaneity, of outraging his native activities, and converting him into a passive instrument to be operated on. Overexactness causes an arrest of growth often more serious in its consequences than neglect; and overemphasis of method is quite sure to fasten the interest of the teacher upon the tools of her profession rather than on the accomplishment of her mission to the child. Teaching does not exist for its own sake. It is always an agency, of value only in facilitating a process. Function is more important than agent. In critical attention to details of method there is danger of destroying the teacher's perspective and of fixing her affection upon the art itself rather than upon the giving of growth by means of the art.

DISCUSSION

SUPERINTENDENT W. H. HATCH, Oak Park, Ill.—Method which results from a full and careful study of the child or from inherent genius may be the highest type of art, and is apparently accomplished by a fullness of knowledge in some phase. Such method will arouse a hunger for more knowledge, satisfied only by more skill.

Why do we seek normal-trained teachers? Because of the inspiration of their training, their knowledge of their relations to the child and their relations to education. This knowledge usually keeps them from failure, and directs them how to start, and finally how to work out the ideal that they have gained from their training. They can build on the foundations there given them, and method saves them while they study their work, the child, and the community.

D. B. PARKINSON, president of the Southern Illinois State Normal School.—We seem to consider the subject of method similarly, but differ in the significance we give to the term. Genius alone will not do the work; it must be coupled with knowledge of the end to be attained. Tact is a quality that will adapt the method to the end.

Mr. Millis in his paper referred to (1) inspiration, (2) suggestion, and (3) imitation, as the factors in method; but these are not always to be relied upon. Activity needs direction, physical energies need control, and the teacher needs to be the directive force. We are unjust to young teachers in regarding them as capable only of imitation. Their originality should be valued and encouraged, tho we are all to some extent imitative.

A. W. RANKIN, inspector of graded schools for Minnesota.—Normal graduates succeed most readily because of the start given them in methodical habits, the respect for their profession, and the practice given under direction. While method avails most in primary grades, the intermediate grades need it too, and need it badly. We are not in great danger of overdoing our method work; this is the peculiar field of the normal.

MISS M. ADELAIDE HOLTON, supervisor of primary grades, Minneapolis, Minn.—My first question to an applicant used to be, "From what Normal are you a graduate?" I now reserve my question until I satisfy myself as to the woman herself, and then ask her training. No method can be broader than the personality of the woman using it. Rigidly following a fixed line of procedure makes trouble. The greatest strength of a teacher is in her own personality, if she is to be a character builder. To sacrifice interest to some cut-and-dried plans is altogether too narrow a view.

MISS ADDA P. WERTZ, Carbondale, Ill.—I deplore conditions which keep a teacher's eyes upon mode of procedure rather than upon the condition of the child, and agree with Miss Holton in her estimate of the value of the teacher's personality; but the habit of methodical procedure prevents chaos in the schoolroom, and with increase of culture and progress in the point of view it results in growth to the teacher.

SUPERINTENDENT JOHN E. RICHESON, East St. Louis, Ill.—As a superintendent, I notice the use and the abuse of method and its especial need in the intermediate grades. Love for the children will evidence itself in a knowledge of their needs. Sympathy suggests means, such as awaken interest, and if not found in the school for good it will likely be received from the street for evil. I would distinguish between method in education and method in teaching, as was done in the paper read.

SUPERINTENDENT E. H. MARK, Louisville, Ky.—A teacher is judged first by her success, second by her method. Too great reliance on a fixed metnod means disregard of condition and neglect of opportunity.

MYTH AND HISTORY IN THE ELEMENTARY SCHOOLS: THE USE AND LIMITS OF EACH

MISS MAY H. PRENTICE, INSTRUCTOR IN THE CITY NORMAL SCHOOL, CLEVELAND, O.

The myth, so far as it has found its way into the elementary schools, has come usually as the handmaiden of nature study. The myths oftenest used are those which are accepted as poetical interpretations of certain natural phenomena. For this use, quite frequently an illuminative one merely, and also to point a moral—sometimes a forced one—the myth has been quite generally accepted. When the myth-story is judiciously chosen and its relation to the principal subject of thought is clear, these are real uses.

History has been firmly established in the schools of civilization since civilization reached the stage of self-consciousness, and particularly since the doctrine of evolution with all its vast implications has caused men to try to solve the problems of the future by a study of the past—not that they may imitate that past, but that they may read its prophecy of the future.

In recent years we have believed that history may be so presented as to have a great value and an ever-increasing interest in every year of the child's school life.

Is it possible that the province of myth is a larger one than it is usually considered; that it has a value all its own; a field lying alongside that of history but not trenching upon it; and correlated but not subordinated to nature study and moral instruction?

The use, or uses, of history are so delightfully definite that we find it a pleasure to recount them and to remind ourselves on what solid ground we stand.

One of the most valuable services which the study of history renders to the child is to bring the child into a rational and ordered world. The sequence of events is not a mere time sequence, he finds. He comes, so, to recognize the law of development: nothing comes from nothing. Thus he comes to question whither, whence, and to be satisfied only when he sees clearly the relation of cause and effect.

No better medium than history can be found thru which to teach the essentials of truthful statement.. The value of this knowledge is difficult to overrate. Some thoughtful people have feared to destroy the trust of the child in parent, teacher, or text-book by too early knowledge of the fallibility of these. But the child who is brought up to stoutly support his own text-book against another in matters of detail is being trained to set up authority as truth instead of truth as authority.

Moreover, a knowledge of the human tendency to error is likely to make the individual strive humbly to be accurate, and in so doing learn charity, whereas the belief that all error is willful and wicked breeds sensitiveness and false pride as well as intolerance.

Further, finding brave, devoted, sincere, and thoughtful people on both sides of any great question, the pupil should learn a large and generous tolerance, respect, courtesy, toward those people whose views differ from his own.

The study of history exercises the imagination of the pupil within given and definite limits. The imagination wears bit and bridle and serves its master to a given end. The ability to put oneself in another's place is needed to establish right relations between man and man.

In the biographical form in which the child largely studies history he finds what we may call practical ideals—ideals which individual men have realized and therefore made to seem possible to the struggling soul which sees its own ideal self realized in them.

The child's knowledge of history does not consist alone in the accuracy of his information. To really know he must feel. Mrs. Hemans'

"Landing of the Pilgrims" is somewhat inaccurate, yet I doubt if it does not contain more history than a page of the "*Classified Cyclopædia of Dates*," valuable as that work is.

The larger patriotism which scorns the sentiment, "My country, right or wrong," the patriotism to which life or reputation is counted nothing worth so that country or party may be stayed in evil and turned to the right, is best taught thru history; and thru it actual volitional unity with the ideal home, school, city, state, is established.

The judgment is trained in this study. Even in the elementary grades the beginning should be made of a careful, critical weighing of values in human testimony; of balancing probabilities as to results; of making sure of one's data before arriving at a conclusion; of finding, merely as a cold intellectual fact, that character and burning enthusiasm and grim determination are factors which cannot be left out of the problem without causing the "answer" to come out wrong.

The study of history does and should cultivate the memory. And this is no slight thing. There is something tonic in the effort required to accomplish a reasonable amount of memorizing, and something very pleasant in the feeling of sure possession which follows. But the memory which the study of history trains is largely of the higher type, and tho the pupil may well commit to memory the preamble to the Constitution, or the Gettysburg speech, yet the important thing is that the organization of his knowledge should be such that, in his mind, a fact can no more be separated from its relations than could the footprint on his island in the mind of Robinson Crusoe.

History, I think, quite easily proves its right to a place in the school curriculum. It can as easily prove its right to a place in every grade, from the home school in which the child begs the parent, "Tell me about when you were little," to the highest grammar grade in which the child gets one breathless glimpse of the significance of the slow and stately procession of the centuries.

The myth is not on so assured a footing as history. In our discussion of the myth we are liable to fall into platitudes, vagueness, or imaginary parallelisms. The realm of myth, which history trenches upon not at all, is that of free poetic fancy and imagination.

It is but a brief, brief time that the happiest little child tarries in that Garden of Eden in which man has dominion over all things. From the time when he first cries for the unattainable he is without its gate, and the sense of his own impotence is the angel with the flaming sword which bars the way against him.

But forever on the skies of his banishment floats a splendid mirage of the native home of his soul, which could not exist but for the reality of which it is the distorted image. In other words, the young soul very early discovers and chafes at its limitations, but it possesses also a sure sense of its oneness with that power and intelligence which is displayed in the universe.

Looking out upon the world about him, the mythmaker saw in the ordered workings of nature the manifestations of spirit akin to his own. Recognizing the kinship, he felt—the child feels—that within himself dwells power, somehow fettered, that shall some day break its bonds and be free. The myth hero is the personification of the human soul so freed, joyous, power wielding.

It doth not yet appear what man shall be, but in the myth child-man dreams a child's dream of the future.

In myth and fairy story the child's spirit is at home; but this distinction between the mental attitude of the child and that of the man of the child race must be kept constantly in mind: to myth-accepting man the myth was fact, was his history, his science, his religion. To the modern child it is none of these things. In his self-made explanations of the world and its phenomena the child tends to the animism of the savage, but as to the stories and explanations presented by his elders he questions relentlessly, "Is it true?" by which he means, "Is it a fact?"

Mrs. Jameson, quoted by Tyler in his *Primitive Culture*, says: "I remember that when I once tried to explain to a good old woman the meaning of the word 'parable,' and that the story of the Prodigal Son was not a fact, she was scandalized—she was quite sure that Jesus would never have told his disciples anything that was not true."

The study of the myth furnishes the basis for the intellectual perception—or apperception—of later years that truth is greater than fact.

It can hardly be necessary to say here that any teaching of myths which emphasizes the idea of superstition or heathenism in their origin must fail to find the value here suggested.

Greater than any intellectual value is the power-giving and spirit-freeing effect of dwelling in that realm of feeling and potential being to which the myth is one of the great gateways. It was Froebel's great discovery that in play the child most freely expresses itself, that in free play every power stretches itself to the utmost as it can never do in the most conscientious work.

In the free play of the imagination, bounded by no unyielding barrier of facts, in images and situations unreal, fanciful, often grotesque, the child finds a keen joy akin to that physical delight found in the abandon of play. In the free play of the imagination the mind stretches itself to the utmost. It was at the age of ten years that the inventor of one of the successful submarine boats, inspired by reading the "*Twenty Thousand Leagues under the Sea*" of Jules Verne, determined upon the undertaking which many years later he brought to a successful termination.

This is the kind of illustration of the value of the creative imagination which the practical world loves and will listen to. But when shall we learn that the body is more than raiment, that the thought is more than the material form in which it embodies itself?

You remember him, the Singer, who

> dwelt where level hands lay low and drear,
> Long stretches of waste meadow pale and sere,
> With dull seas languid tiding up and down.
> The pale horizon walled them in, and still
> No lifted peak, no slope nor even mound.

Daily he gazed seaward:

> "There must be hills," he said,
> "I know they stand at evening rosy-red
> And purple in the dewy-shadow morn."

So gazing, at last,

> Sudden he saw
> Far out to seaward mountain peaks appear
> Slow-rising from the water pale and clear,
> Purple and azure, there they were as he
> Had faithful learning vision they must be.

In vain he called his fellows to see. They saw not, not even when he brought his argosies thence. Yet of them who for the gladness in the Singer's face set sail to the unseen hills, some returned madmen like himself, rich in a wealth which the world could not see nor measure:

> No man's scorn
> Could hurt nor hinder them. No pity born
> Of it could make them blush or once make less
> Their joy's estate; and as for loneliness
> They knew it not.

Forever better and more blessed is that child who has caught even one fleeting glimpse of the Singer's hills.

The breezy out of door non-morality of many of the classic myths makes them especially valuable literature for little children. It is not necessary that these little ones should all the time have their teeth set on edge by that fruit of the tree of knowledge of good and evil of which their forbears ate. There is serious danger in a child's too early consciousness of good and evil in himself. Conscience, as is well illustrated in the case of poor little Betty Sewall, and other God-fearing—or was it devil-fearing—colonial children, may sometimes be transformed from the cheerful guide and friend of childhood to a tormenting demon, breeding morbidness, unrest, and irresolution in his little victim's breast.

Nevertheless some of the beautiful myths which do teach deep ethical truths, like that of King Midas and the Golden Touch, may well become a part of the "invisible world of the child," "the fire-mist heaven," "the chaos that precedes the spiritual life," as Colonel Parker calls the world of the child's imagination. Let the story be told and told and told again, if the children care for it. In the fullness of time, when from het "fire-mist heaven" an ordered world is evolved, the soul of the story will draw its own body of thought and conduct to itself. Only let it be remembered the story will do its work better unspoiled by a sermon.

Other myths, like the story of the whispering reeds which told the secret of King Midas' ears, teach prosaic virtues, such as prudence, although often these are better taught by the folklore stories, which are to the myth as *Poor Richard's Almanac* to Emerson's *Essays*.

The answer which would be promptly given in many teachers' assemblies as to the value of the study of the myth would be "That the children may understand allusions in literature." There is here a curious reversal of values. The proposition is hardly more tenable than it would be when made in regard to history. We do not study the stories of Valley Forge and Bunker Hill in order that we may understand allusions to them. We study them for the spiritual values which are in them. In like manner we study the Hebraic and Hellenic myths out of which so much of our poetry, so much of our deepest thought, have sprung, that we too, all unskilled in the art of verse as we are, may be poets; that our brains may be afire with the beauty of the myth-images; our hearts stirred with their interplay of feeling. We shall undertand the allusions, yes; but that will be incidental. And if to us Orpheus and Psyche and Perseus are but names to ornament a rhyme, we have seen neither into the heart of the myth nor into the heart of the poet.

In the upper grammar grades the study of the myth would naturally change its form, becoming to some extent the study of mythology.

The following pages, the first from Tyler's *Primitive Culture*, the second from Froude, are suggestive of what might be gained from this phase of study:

> The treatment of similar myths from different regions, by arranging them in large compared groups, makes it possible to trace in mythology the operation of imaginative processes recurring with the evident regularity of mental law; and these stories, of which a single instance would have been a mere isolated curiosity, take their place among well-marked and consistent structures of the human mind. . . . . Myth may be more uniform than history.
>
> We, with the glorious present which is opening before us, we shall never enter into it, we shall never understand it, until we have learnt to see in that past, not error, but installment of truth, hard-fought-for truth, wrung out with painful and heroic effort.

Mythology, from this point of view, is a study of the scientific, ethical, and religious development of the human race. I am not suggesting a formal study of comparative mythology for children in the elementary schools, but surely a child of thirteen may easily see the similarities in the myth products of different peoples in like stages of development. We can only—a phrase we use much oftener for the primary classes than for the grammar grades—"establish an apperceptive center." But the grammar-grade pupil may gain possession of the germ of the idea that human development along religious and ethical lines follows fixed laws, that the truth of today is only the blossom of the truth of yesterday, and that the truth of tomorrow will be only the fruit of the truth of today.

With this once understood his study of the truth of yesterday becomes more reverent; and he is not dismayed when he beholds, as he must, the truth of today changing its form.

These are the points which I have tried to make in regard to myth study: (1) The myth expresses a great reality in man's experience; (2) in the exercise of the free imagination the mind's powers grow; (3) the fine play about non-moral ideas fostered by some of the myths is wholesome; (4) rightly chosen, some of the myths become in the fullness of time, since we think by analogy, a moral force; (5) the value of the knowledge of mythology consists, not in our ability to find the meaning of allusions, but in the fact that our mental and spiritual condition is such that the meaning of the allusions must inevitably find us; (6) thru myth study a basis for true knowledge of the laws of spiritual and mental development is gained.

Myth, then, as I see it, is not preparatory to history nor supplementary to it, but each is complementary to the other. History deals with the outer, myth with the inner, man—because, as Tylor truly says, "Myth is the history, not of its subjects, but of its authors." Hence, paradoxical as it seems, in history man tries to tell the truth, in myth he quite certainly tells the truth to him who listens aright. It is only as we think of myth so, as the history of the human soul, that it ceases to be to us childish fable, and we know that truly Theseus slew the Minotaur and Perseus the Gorgon, and that the tragic end of the fatal hunt of Calydon was inevitable.

I have said nothing of the use of either myth or history as language material, and for this reason: If given an opportunity the child will express what is in his soul. If the myth and history taught are worthy to become a part of the child's soul stuff he will express what they have brought him when the opportunity offers.

DISCUSSION

MISS STELLA L. WOOD, superintendent of Kindergarten Normal School, Minneapolis.—At the closing of a sewing-school, not long ago, each class repeated verses which during the weekly work hour had been committed to memory from the Bible. One group of serious-faced little girls arose and in the most impressive manner recited the following verses:

> Make thee an ark of gopher wood, rooms shalt thou make in the ark, and shalt pitch it within and without with pitch. And this is the fashion which thou shalt make it of: the length of the ark shall be three hundred cubits, the breadth of it fifty cubits, and the height of it thirty cubits.

The fact that these verses came from the best of books led to the belief that even if bereft of context and utterly foreign to the interest and understanding of the children, nevertheless, somehow, in some unexplainable manner, they would be instructive and uplifting.

It sometimes appears to the unprejudiced onlooker that this same feeling which led to the choice of the dimensions of the ark for a "memory gem" often directs the choice of myths for use in kindergartens and primary schools. The awe-inspiring fact that this myth material has been handed down thru countless generations seems to so impress us that we apparently leave behind us our common-sense and discriminating taste when we approach this particular kind of story material. We open a volume of carefully selected myths, which the preface declares has been used by the compiler with great success upon all occasions, and we are so blinded by the fact that these are *myths* that we fail to use the tests which we apply to all other literature in our search for stories, and are betrayed into choosing something for our children which we never would have chosen had it not been found among the classics. And the most lamentable fact of all seems to be that probably in that self-same volume of carefully selected myths might be found just the needed story — fine, dramatic, and yet simple enough to be used for the joy and edification and entertainment of the children in that part of the elementary school known as the kindergarten.

It would seem that this is an age of many temptations designed to lure the kindergartner from the path of simplicity. The charms of basketry and rug weaving without, and within the desire to be considered progressive, have played havoc with many of us, and the battle once fought and apparently won in favor of simple work, within the child's scope and of his own doing, seems about to be fought over again with new foes. We need much courage to maintain simplicity in song, story, and handwork when the educational world is so fascinatingly full of good things which we long to give to our kindergarten children.

It is hard to keep in mind the fact that strong meat, although we may cut it into very small pieces, cannot be digested and assimilated by organs prepared to deal with milk. A story whose meaning and symbolism is adult cannot be successfully imparted to young children, even by means of words of one syllable. We need the courage to reject much that is beautiful and fine because it is suitable for the older children, and not for the youngest in the school family. We must firmly keep to that which is simple and within the child's grasp. It is possible to "cram" even in the kindergarten. The average child is so eager for stories that he will appear interested in most unprofitable ones, if they have a vestige of action and things happen in them. One should look carefully at the seemingly interested child during the telling of a story. Sometimes he is like the ordinary mortal who listens intently to a Wagner overture. He is sure it must mean something, and sometimes it almost does. The expression on the child's face often tells the observer that he hopes something is going to happen in that story soon, and he holds on as long as frail human flesh will allow.

And yet the world is full of good stories for little children. Often we might enrich both ourselves and the children by replacing an ordinary tale with a classic embodying the same truth or imaginative fancy in more enduring form — a story which we may meet again on canvas, in marble, or in song. But great wisdom is needed in the choosing.

In the use of historical stories for very young children a wiser choice seems to be exercised, perhaps because the story side of history contains a more intimate appeal; there are so many simple yet glowing stories of "people who *do* things;" of Columbus, the Pilgrim fathers, of Paul Revere and his midnight ride, of Washington, and the lives of many who, with the simplicity of the truly great, have so much in common with little children.

Even here we use many stories because they are *history* which, if judged merely as stories, would be rejected as too involved or remote. But bringing to the choosing of myth and history all the discrimination we possess, often rejecting much, there still remain stories full of fire and life and glorious action, simple, primitive enough to find and meet the kindergarten child just where he is. To see children listening to such stories, told in a manner to bring the picture before them, is to witness the satisfaction of those who feast at a full table, rise refreshed, and go on their way rejoicing.

DEPARTMENT OF SECONDARY EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 9, 1902

The first session of this department was called to order in the assembly room of the East High School at 9:45 A. M. by the president, J. Remsen Bishop, of the Walnut Hills High School, Cincinnati, O., who delivered the opening address.

At its close, Miss Mynn Stoddard, of Minneapolis, favored the section with a vocal solo, "Oh, for a Burst of Song," *Allitsen*, which was heartily encored, when she responded with "When I Awake."

In the absence of Superintendent R. G. Boone, of Cincinnati, Principal Reuben Post Halleck, of the Boys' High School, Louisville, Ky., addressed the meeting upon "The Social Side of High School Life."

The president then appointed the following Committee upon Nominations:

George B. Aiton, state inspector of high schools for Minnesota.
W. J. S. Bryan, principal high school, St. Louis, Mo.
E. W. Lyttle, inspector for University of New York, Albany, N. Y.

The meeting then adjourned to the different conferences, as follows:

Room A, Classics. Leader, Superintendent Lafayette Bliss, Waseca, Minn.

Room B, Mathematics. Leader, Charles W. Newhall, department of mathematics, Shattuck School, Faribault, Minn.

Room C, Biology. J. Remsen Bishop, Walnut Hills High School, presiding officer.

At 4:30 P. M., in the chemical laboratory of the State University, the subject of physics was discussed in connection with the Department of Science Instruction, with Wilbur A. Fiske, instructor in physics, high school, Richmond, Ind., as leader.

SECOND SESSION.—THURSDAY, JULY 10

The meeting was called to order in the assembly hall of the East High School by President Bishop, at 2:30 o'clock P. M.

Mrs. E. W. French then favored the audience with the following songs: (*a*) "Thy Beaming Eyes," *MacDowell;* (*b*) "Madrigal," *Homans;* (*c*) "The Rosary," *Nevins.*

In the absence of Professor John William Perrin, Western Reserve University Cleveland, O., President Charles D. McIver, of the State Normal and Industrial College, Greensboro, N. C., addressed the meeting upon "Cost of Education." At the close of his address, the Committee on Nominations reported as follows:

For *President*—Inspector Charles F. Wheelock, Albany, N. Y.
For *Vice-President*—Principal Reuben Post Halleck, Louisville, Ky.
For *Secretary*—Principal Wilbur F. Gordy, Hartford, Conn.

And they also reported the following resolution:

Resolved: That the officers of this Association be instructed to act as a committee to seek a federation of the secondary associations in the various states and to secure the establishment of such associations in states where they do not exist.

On motion of William Schuyler, of the St. Louis High School, the report of the Committee and the resolution were adopted.

After a resolution of thanks to the local committee and to the singers for their aid and entertainment the meeting adjourned to the several conferences:

Room A, History. Leader, Superintendent Charles R. Frazier, Little Falls, Minn.

Room B, English. Leader, Professor Thomas C. Trueblood, University of Michigan, Ann Arbor, Mich.

Room C, Principals' Conference. Topic, "School Athletics." Leader, W. J. S. Bryan, principal of the high school, St. Louis, Mo.

CHARLES ALDEN SMITH, *Secretary.*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS—CALL OUT THE LEADERS

J. REMSEN BISHOP, PRINCIPAL OF WALNUT HILLS HIGH SCHOOL, CINCINNATI, O.

"To avoid dealing with facts, always have your speech in your pocket," is the moral Mr. George Ade appends to his whimsical account of the "tough trustee's" address to high-school graduates. The converse of the humorist's advice has been followed on this occasion, and an attempt will be made to deal with a few facts concerning the present condition of our public-school system.

Everywhere thruout this progressive republic the year has been marked by extraordinary activity in all departments of human endeavor. The schools have not stepped aside from this mighty current, but have forged well to the front of the great stream of American progress. Kindergarten work, nature study, commercial branches, all the newer elements in the educational scheme have been taught with better insight into their educational value than ever before. Practical ends and cultural ends, if indeed there ever has been any real difference between them, have now apparently been reconciled. It has been found that the cultural aim is best attained when the practical aim is never lost sight of at least in the mind of teacher and pupil. The practical aim is to live honorably and independently; the cultural aim, to live in the noblest atmosphere. The one certainly does not preclude the other.

Naturally the interested observer, the *doctor philosophus* reviewing the situation, looks for the means that might have produced even a better result than that which has been attained. In the matter of public-school progress and improvement the defect easily suggests itself. Professor Paul H. Hanus in a recent address pointed out the fact that the great committees whose labors have glorified the National Educational Association and benefited American public schools in a measure not easily computed have neglected in a curious fashion the work of one another and the history of our institutions. Each committee seemed to feel that it had the whole scheme to reconstruct, so far as its field extended, instead of the seemingly obvious duty of studying the entire educational field, and in all its own work never failing to consider the demands and limitations of other school periods and departments. On this basis only, as Professor Hanus points out, can final work be accomplished.

Whence, then, this fragmentariness and overlapping exemplified in the work of our committees and observable thruout the system? May they not be traced to lack of scope in school supervision? At any rate a plea for better general supervision of our school system has not seemed out of place at the present juncture.

There are various methods of school supervision in this country, but the prevailing method is very limited in scope. City and county superintendents practically do the supervising of our public schools, and the practice is thoroly in accord with the American idea of local self-government. Occasionally we find a state superintendent or school commissioner attempting to supervise the schools of the state. In some instances a vast system of examinations has been devised to direct the schools. Occasionally we find both systems in use. On the whole, the state appears to be the convenient and sufficiently large unit.

Let us dwell a moment upon the examination system. No one knows better than the teacher of long experience that the examination is at best a necessary evil. Beyond such necessary tests as a teacher must give to steady his pupils, the examination is a delusion and a snare — a device of some evil power that would destroy all mental activity except that of the memory, which it would gorge to suffocation with unpalatable and indigestible food. Nothing short of omniscience could devise the set of examination-questions that would properly test the results of the teacher's work, if that teacher were the best of teachers with liberty to teach. Any dunderhead can devise questions that, if they loom ahead of the teacher, who knows the examiner's idiosyncrasies and former performances, can kill individuality and initiative on his part. The teaching of botany is growing in several directions: if the teacher grows in one of these directions we should be abundantly satisfied with him. Shall each teacher be tested in all lines of development, or all teachers in one line of development?

A murmur comes from across the water that the English are not satisfied with the material that has dominated their civil service thru the examination system. A United States engineer stated a short time ago in a private conversation that his most efficient men entered the service low down and came up; they are better civil servants than those who came in thru brilliant examination passing. A system of cramming persistently persevered in can land any normally constituted youth well up in the list of examined. It takes more than a temporarily well-stored memory to make an efficient civil servant. Let examinations be kept as a necessary means to exclude the flagrantly incompetent, and to keep the door open for the irregularly trained but competent men, but let every nerve be strained to furnish institutions that train for service, and in the course of training discover and eliminate incompetents.

Mistrust of one another was the vice of the Greeks. To some extent it is the vice of Americans. We do not like to say: "So and so is a thoroly well educuted man. He is also an educator of catholic sympathies and long experience. This broad-minded and well-trained man shall be our supervisor of education in this state. We will give him power to choose assistants and expect him to lead us to greater efficiency and greater economy in our public-school system." No, rather we shall either erect a mechanical and cramping system of examinations — with grave danger of tyranny over the educational institutions of the state, or let things slide, as they have been sliding, in the good old happy go lucky way.

Once indeed we trusted a man and made him school commissioner of the United States. This National Educational Association, it seems, advocated the creation of the office and the choice of the man. Who will tell how great has been the benefit to American schools directly due to the work of Dr. William T. Harris? We ought to have a Dr. Harris in every state capitol. Why then should not the next move in the progress of American public schools be the institution of state systems of supervision developed out of the present underpaid and underofficered state bureaus? If the proper legislation were had, state educational organizations could greatly influence choice, if, as it should be, the choice were left to the governor with the consent of the legislature. In England Matthew Arnold was for many years a school supervisor. The people of Minnesota have an object lesson in the fine record of their inspectorship of high schools.

Under such a system we should at least know the condition of courses and methods thruout our state, and could direct our own endeavors by the experience of others. Might not this lead to that degree of uniformity which is indispensible to the success of any educational system, without cramping initiative and individuality, the two most valuable elements in the work of the true teacher?

We teachers constitute not the least patriotic body of American workers. When we know the best we seek the best. Ought not every facility be afforded us, by wise criticism of our methods and information concerning the methods of others, to keep abreast of the grand movement of American educational progress?

THE SOCIAL SIDE OF HIGH-SCHOOL LIFE

REUBEN POST HALLECK, PRINCIPAL OF THE BOYS' HIGH SCHOOL, LOUISVILLE, KY.

Asked as I was yesterday to make an address this morning in place of Superintendent Boone, of Cincinnati, who has been unavoidably detained, I accepted, because I wish to emphasize some points at which I can merely hint in my paper to be read on Friday afternoon before the Child-Study section. The fact that the subject of Superintendent Boone's paper before this body, and of mine before the Child-Study section, are practically the same, is my excuse for addressing you at this short notice. This talk must be considered as amplifying and supplementing that paper.

I desire to emphasize this morning the social side of high-school education. There is more in education than books and correlation, necessary as they are. They will develop and bear best fruit only in a social atmosphere. I have often wondered how, in a well-built house, with the windows tightly closed, the barometer immediately registered any change in atmospheric pressure on the outside. I have also wondered how any little jealousy between teachers, any friction whatever in the faculty, immediately made itself felt in the school. We cannot expect to develop a social atmosphere in the school unless we teachers are ourselves social, unless we turn the blind spot in our eye on each others' faults, and the rest of the retina on each others' excellencies. The pupils will instinctively catch and reflect our attitude toward each other and toward them. One of the most important questions to ask about a school is: "Is it pervaded by a feeling of good fellowship for all — of teacher for teacher, of teacher for pupil, of pupil for pupil, and of pupil for teacher?" The unsocial school acts like frost on tender vegetation. The social type of school is like the genial spring sun developing the buds.

I firmly believe that at the present time there is but one subject in the majority of high schools, if the term "subject" be not a misnomer, which meets fairly and squarely the conditions of outside life. This so-called subject has the strenuous aggressiveness of outside life, but it further calls for a certain type of group activity which is almost necessarily social. I refer to athletics. Here is God's plenty of life. Football is group activity. The eleven is a social unit. One member of the team does not like to have another member smoke, stay up half the night, or do anything to impair the football body politic. Watch them on the field. Out of the struggling mass a boy leaps with the ball and starts for the goal. The crowd cheers, but perhaps it does not realize the act of self-abnegation which allowed the runner to emerge. A member of his team, now at the bottom of the human pile, threw himself in front of his opponent, who was about to grasp the boy with the ball. As a result, that boy is free to make his run for the goal. See! that boy is followed by friend and foe. The foe is on the point of seizing him, when a friend interposes his shoulder, and the runner escapes to cross the goal line. The cheers of the multitude are for him; but without that group activity, without those acts of self-abnegation on the part of the members of his team, that young hero could never have dashed across the goal line. It is the same way in baseball. The batter signals that he will make a sacrifice hit, so that the man on third can come in and score. Although he yearns to knock the cover off the ball, he taps it gently, starts for first base, is thrown out, but the runner comes home from third base.

The pre-adolescent does not readily respond to these calls for altruistic group activity. He loves to make a fine individual record, no matter what its effect on the team. High school teachers are fortunate in dealing with a being in whom those germs of altruistic activity are rapidly developing. At this critical time high-school education must not nip them in the bud. Too many adolescents have already suffered from the frost of unsocial education, which has given the altruistic activities no chance for free play.

This love for games involving varied and energetic group activity is a more marked characteristic of the Anglo-Saxon than of any other race. Games like football, baseball, and cricket are not popular in France, Germany, Italy, or Spain. The English, and, in a greater degree, the Americans, are fond of such games. It is probable that such a liking will always be a characteristic of the dominant races, for the world can never be both won and permanently retained except on a social, co-operating, altruistic plan. This republic is an example of the voluntary group activity of a number of states.

The adolescent's social feelings can be developed by giving him something to do for someone else. Always do things for him and he will grow up selfish and unsocial. Adults are more interested in those people whom they have helped than in those who have done them favors. Lay burdens on adolescents and by so doing you will develop their social and moral growth. They love to bear burdens, partly because your imposing them shows your confidence in their ability to surmount difficulty.

Whenever possible, studies should be made to serve a social end. Pupils are too often urged to acquire knowledge because it will enable them to surpass the other fellow. This is an absolutely wrong point of view. They should be taught to know things in order to *help* the other fellow. It is even true that in the majority of cases we help ourselves best by helping other people. The individual or the corporation that finds out what others want and tries to minister to that want in the most efficient way is traveling the surest road to success. A love for good reading may be more easily taught if the social stimulus is invoked. Have your pupils read books, not entirely for their mere selfish gratification or knowledge, but in order to tell the most instructive or interesting parts to others —to the class, to some member of the home circle, friend, or teacher. Such books will be better read.

In order to improve the social life of the high school, teachers need to cultivate their imagination. Varied ways of developing the social activities must be devised. Do not expect adolescents to be more easily interested than adults. They love a change as much as adults do. You must introduce into the high school world as much variety as you can. For instance, at my school, which is attended only by boys, we wished a reading room stocked with the best periodicals and books. We had to earn the money. After a conference, we decided to present the opera *Pinafore* in the largest auditorium in the city, and to have the boys take the girls' parts. Here was group activity made to converge toward a given end. A large part of the school served either as business managers or performers, and all were intensely interested in doing the best they could. An audience of twenty-five hundred came to hear them, and as a result the reading room was magnificently stocked with periodicals and books. A number of different departments were added to the high-school paper, and different boys put in charge of those.

If you make your high school more social, you will find that fewer pupils will drop out. The social life is developed in connection with action. If you make these activities interesting, pupils will strain a point to return, for there is something to look forward to in the school world. But neither principals nor teachers need look for high social development in their school unless they are first social themselves—unless they are the fountain head whence flow the social waters.

THE THREE ELEMENTS IN THE COST OF EDUCATION

PRESIDENT CHARLES D. McIVER, THE NORTH CAROLINA STATE NORMAL AND INDUSTRIAL COLLEGE, GREENSBORO, N. C.

[AN ABSTRACT]

Sectionalism has passed, but individualism cannot be changed. Each section has its own particular needs and must be allowed to interpret them for itself. Great friction will be prevented and harmony promoted by each section's setting forth its own situation and needs for itself, and not having them proclaimed by others.

I speak of the cost of education from a southern standpoint, and the first element in cost is the money cost. This means more in the South than in the North, not only on account of the loss of property due to the war, but also on account of the loss of producers of property. North Carolina furnished one-fifth of the soldiers of the Confederate Army, and left on the battlefield one-third of all she sent. Think what this means to a country! What would it mean to Minnesota if one-third of its men from sixteen to sixty were wiped out of existence? It has taken us forty years to get back to where we were before the war. According to the United States census, there is now on the tax books of our southern states about the same assessment of property that there was in 1860. While the North has been going on in multiplying wealth, we have been recuperating, and are now pecuniarily where we were forty years ago. I call this the forty years' wilderness of poverty through which we have passed. But we are better off today than we were forty years ago, because we have no slaves, because we are individual producers, and are in sight of commercial independence.

The money cost of education is therefore a serious matter for us of the South, though neither there nor elsewhere is it so great or so rare as the second or third elements of cost of real education.

The second element of cost is the wear and tear on the life of the teacher. There is no escape from this. Every successful teacher must give *himself* and believe in the ultimate success of his work. There should be no such word as *can't*. *Can* is the only word for the teacher, even if it takes his last drop of energy to succeed. An ambitious example is worth more than precepts on perseverence. He must have faith in the future and hold up before girls and boys the highest ideals of womanhood and manhood. Let the girls have before them the pictures and the lives and work of such women as Dorothy Dix and Frances Willard. The teacher must lead the children, must work and fight and strive. There is no other way.

The third element of cost is the drudgery of the pupil. It is the only absolutely essential element, and is rare. There is no escape from the drudgery and grind of the pupil's life. There is no royal road to anything in this world worth getting to. The habit of work is more important than the acquirement of knowledge.

Indeed, knowledge may come, but it lingers as wisdom only among the workers.

Let us teach children the glorious gospel of toil and service, train them to become masters, and imbue them with such a spirit as will send them into the world, not to see how much they can get out of it, but how much they can give to it.

ROUND TABLE CONFERENCES

ANCIENT CLASSICS

LEADER, LAFAYETTE BLISS, SUPERINTENDENT OF SCHOOLS, WASECA, MINN.

The conference of classics held in room A of the East High School, with Superintendent Lafayette Bliss, Waseca, Minn., as leader, was well attended, and a lively discussion was had as to the utility of classical study and its continuance in the high schools of the country. The discussions were wholly impromptu, no previous appointments having been made or papers written. Nearly every teacher present favored the continuance of Latin and Greek in the secondary schools. In opening the discussion, Mr. Bliss asked several pertinent questions and gave some important statistics with reference to classical study in Minnesota and the value of such discipline in producing leaders. He said:

> Taking into account the present extent of human knowledge, and the large number of subjects clamoring for a place in our courses of study, what place, if any, should be assigned to that body of knowledge known as the "ancient classics"? How much consideration should be given to the opinions of such men as Andrew Carnegie and Charles M. Schwab, typical business men, with regard to college education, and particularly classical studies?

Mr. Carnegie says, in his new book, *The Empire of Business:*

> Look out for the boy who has to plunge into work direct from the common school, and who begins by sweeping out the office. He is the probable dark horse that you had better watch. . . . . The prize takers have too many years the start of the graduate; they have entered the race invariably in their teens, in the most valuable of all the years for learning — from fourteen to twenty. While the classical student has been learning a little about the barbarous and petty squabbles of a far-distant past, or trying to master languages which are dead — such knowledge as seems adapted for life upon another planet than this, as far as business affairs are concerned — the future captain of industry is hotly engaged in the school of experience, obtaining the very knowledge required for his future triumphs.

The schools are supported by the people. What attention should be paid to the widespread popular opposition to classical studies in the high school, as shown by magazine articles and newspaper editorials?

Has any body of knowledge other than the classics yet been found that so effectively unites the "effort and task" system of the ancients and the "natural interest" system of the moderns as to produce a scholar and to train the feelings to react in sympathy with civilization, i. e., culture, character, citizenship?

Should Greek and Latin be required for the degree of bachelor of arts?

There have been two general lines of study: (1) linguistic; (2) scientific.

The one studies the literary monuments of the world, and its workshops are the libraries; the other studies scientific processes, and its workshops are the laboratories. The A. B. degree all thru history has stood for the linguistic studies. To confer this degree upon those who have followed other lines of study than the classics is to break the continuity of history and some think to usurp the rights of those who have done the work for this degree.

The classics are studied more in the eastern and middle states than in the West, according to the reports of the United States Commissioner of Education.

The West puts a premium upon short courses of study.

The number of students of Greek has nearly doubled, take the country over, in the last decade, and in the percentage of increase it ranks among the first of studies.

Take the country over, Latin seems to be a popular study, as shown by the reports of the United States Commissioner of Education.

In Minnesota, however, the study of Greek is not in a flourishing condition, and there are some indications that in this state Latin will eventually go the way Greek has gone.

At the risk of being accused of lacking in state patriotism, I wish to make a few observations on the study of Greek in Minnesota and the attitude of the people toward the classics. The number of students of Greek has increased 95 per cent., take the country at large into consideration, during the last ten years. During the same time the number of students of Greek in the public high schools of Minnesota has decreased 25 per cent. If we take the public high schools of the whole country into consideration — not private academies and parochial schools, which were included in my first item — we find the increase in the number of students studying the Greek language to be 135 per cent. during the last ten years.

The falling off in Minnesota has been during the last five years, and has been in the public high schools; not in the private academies, for they show the normal increase.

This falling off comes from the hostile attitude of the people, and their demands are yielded to by superintendents and boards of education; otherwise Minnesota would show the normal increase in this study and be up with the most progressive states, as we are in other branches.

Minnesota is surpassed in the study of Greek from three to six times by Georgia, Missouri, Colorado, and California. New York, New Jersey, and Pennsylvania show an increase in the last ten years of from three to five fold.

Leaving out Minnesota, the states in our immediate neighborhood — the north central division — show an increase of nearly 240 per cent.

Minnesota, Florida, and Texas alone show a decrease in the number of students taking Greek during the last decade.

The attack made upon the study of Greek in Minnesota is comprehended in these words: "That Greek is not needed for its disciplinary value; that it is giving little culture; that if theologians, philologians, and dilettante idlers will have it, they must go out of the state to get it."

It looks now as tho this condition of things will soon be ours as far as the state university is concerned, for in 1891, 22 per cent. of the freshmen at the state university were students of Greek, but in 1900 the number had dropped to less than 7 per cent., and these were not supplied by the high schools as a rule.

At Harvard, with the same conditions as the University of Minnesota, in 1891, 91 per cent. of the freshmen entering were prepared in Greek, and in 1900, 89 per cent. had two full years of preparation, and 70 per cent. three years' preparation in this subject.

The conditions of entering Harvard and the University of Minnesota are about the same, yet about the same per cent. of students enter Harvard with Greek preparation as enter the University of Minnesota without it. At Yale and other leading eastern universities Greek is required of all who enter.

With the decline of the Greek courses in this state, we find an astonishing growth in the English and civic courses, which are easy and popular in both the university and in the high schools. These courses are generally known as "snaps," and their general effect, in the high schools at least, has been to lower the standard of scholarship and to put a premium upon that which is easy and inferior.

In a nation of money-makers, where the dollar is too apt to be placed above the man, is it not the part of wisdom that a large number of our young men, in preparing for life, study the language and literature of a people who stood for high ideals in the home, in the school, and in the state? If it be admitted that a part of culture is concerned with taste, feeling, and emotion, then the classics are culture subjects in a pre-eminent degree.

President D. C. Gilman once said (*Cosmopolitan Magazine*, May, 1897):

> Notwithstanding the long experience of the human race, it is surprising to see how many people despise the classically bred man, how few college graduates are to be found in the halls of legislation, etc.

Let us look into this startling statement. Let us take the scales of commercialism and weigh this question that is so often asked: "Does college education pay?" I am indebted for these facts mainly to Professor J. C. Jones, of Missouri university.

In Appleton's *Cyclopedia of American Biography* there are in round numbers fifteen thousand names of men who have done something in the world sufficiently important to have their names thus recorded. Of that number more than five thousand are college graduates, and less than ten thousand are not college graduates.

It is estimated that there have been 150,000 college graduates who have lived in our country since the beginning of our history in 1776; that is, one man in thirty who has graduated from college has reached some distinction.

As the male population of our country grows up and passes thru the age of college education, a few more than 1 per cent. graduates from college. Count the graduates 150,000; then the non-graduates would be fifteen million. These fifteen millions have furnished the ten thousand names in the cyclopedia. The ratio stands for college graduates 1 to 30; the ratio stands for non-graduates 1 to 1,500. Thus we see that measured in this way a boy who educates himself in college increases his chances of success fifty fold.

Let us look into the influence in our national life of each of these classes, the graduates and the non-graduates. Bear in mind the fact that the graduates are represented by 1 per cent. of the male population and the non-graduates by 99 per cent.

The 1 per cent. of graduates have furnished about 36 per cent. of the House of Representatives, and more than 36 per cent. of the Senate. This is thirty-two times their share of seats. There should be now only one senator and four representatives, but there are thirty-two senators who are graduates, and 128 representatives.

Forty-seven per cent. of the speakers of the House have been graduates, and since 1841, 55 per cent. of the speakers have been graduates, of colleges.

Of the committee that drafted the Declaration of Independence — Thomas Jefferson, John Adams, Robert R. Livingston, Benjamin Franklin, and Roger Sherman — three were college graduates, that is, 60 per cent., and the men who wrote it — Thomas Jefferson and John Adams — were both college graduates. Of the fifty-six men who signed the Declaration of Independence, twenty, or $35\frac{7}{10}$ per cent., were college graduates.

The men who submitted the four plans from which our Constitution was framed — the Virginia plan (James Madison); the South Carolina plan (Charles Pinckney); the New Jersey plan (William Patterson); and the Hamilton plan (Alexander Hamilton) — were all college graduates, with the exception of Charles Pinckney.

Of the Constitutional convention that adopted the Constitution there were fifty-four men. Twenty-three of these were college graduates, that is, $42\frac{5}{10}$ per cent., and just half of the entire number were college-bred men. The three men who did most to secure the ratification of the Constitution by writing the articles of the "Federalist" — Madison, Jay, and Hamilton — were college graduates.

The 1 per cent. of college graduates in our male population of graduate age is furnishing: 36 per cent. of the members of Congress; 56 per cent. of the presidents; 54.16 per cent. of the vice-presidents; 55 per cent. of the cabinet officers; 69 per cent. of the justices of the supreme court; 86 per cent. of the chief justices.

The proportion of graduates increases with the importance of the office, considering elective and appointive offices separately. More college graduates than at first are being chosen to the presidency, to House of Representatives, cabinet, and supreme bench. The vast majority of these leaders were classically bred men. The college graduate is a leader in whatever he engages. I believe this same showing can be made in the commercial field as to real leaders, Mr. Carnegie to the contrary notwithstanding.

WILLIAM SCHUYLER, assistant principal St. Louis High School, said he believed that the classics should be retained in the course, on the ground of public utility. The great need of the present time was a higher idealism, a more spiritual outlook. The majority were given over to mere materialism; men lacked the finer appreciation; mere size constituted greatness. To them a building twenty-four stories high was more important than the Parthenon — that little miracle of perfect proportion in architecture. It was only thru the study of the classics — especially of Greek — that this finer æstheticism could be nurtured. A boy who had read some Homer in the original obtained what he could get in no other way, for the finest aroma of poetry was lost even in the best translations, as every one knew who had studied the world's masterpieces in their original form. Our entire artistic life was derived from the Greeks, as our institutional life was largely from the Romans, and first-hand contact with the literary remains of those ancient peoples was needed for the fullest, completest modern life, and for a knowledge of our own civilization. And the production of men who could lead such lives was of the greatest public utility. Referring to the statement made by Mr. Bliss, that in Minnesota pupils had abandoned Greek for easier courses which they called "snaps," Mr. Schuyler held that one of the greatest benefits of the Greek course came from the fact that it was no "snap," and never could be made one. It required the keenest application, even extreme "aggressiveness" of character, to master the study; but the results more than paid for the exertion, not only in the æsthetic line, but in the strength of character produced. It was the speaker's experience in his school that in the senior class the most solid and capable boys and girls were always to be found among those taking the classical course. Whether this was because the brightest pupils chose this course, or because this course developed the brightest pupils, he left it to his audience to decide. These, however, were the facts, and he considered it of the greatest public utility to encourage the production of such characters rather than the multiplication of those who followed the merely mechanical law of following the "line of least resistance." It was the duty of teachers, not only to work for the retention of the classics, but to do all in their power to induce pupils to undertake their study.

Charles S. Hartwell, teacher of English in the Boys' High School of Brooklyn, N. Y., said, in substance: One reason for the decline of interest in the study of the ancient classics in certain sections is the fact that their true relations to the mastery of English are not widely enough understood. Certain facts, like these, should be held before the people, both parents and pupils: Fifty-six per cent. of the words in our dictionaries are Latin and 10 per cent. Greek, so that two-thirds of the English vocabulary is classical in its origin. How is a student who plans to enter any line involving speaking or writing—as the law, the ministry, or public life—to enrich his vocabulary, except by the study of the classical element, from which development since the Norman conquest, in 1066, has been drawn? It is true that in our principal writings from 80 to 97 per cent. of all the words as they appear on the page are of Saxon origin, but this is due to the start of six centuries which the Saxon conquest of 449 A. D. gave to that element. The common activities are well expressed in Saxon, but the enrichment of our language comes from the Latin and Greek. Even the scientist, who decries classical study in his demand for more time in our courses for the new forms of knowledge, goes to the Greek for the names to express his discoveries and inventions.

Another fact which should be held before the public is the vitality and spread of the English language. In Brander Matthews' *American Literature* are some interesting statistics which illustrate this. In 1800, those who spoke French as their native tongue numbered thirty-one millions; in 1900 the number was fifty millions—a gain of about 60 per cent. In 1800, those who naturally spoke German were thirty millions; in 1900, seventy millions—a gain of 133 per cent., or twice the French gain. In 1800, only twenty millions spoke English, while a century later there are one hundred and twenty-five millions, a gain in one century of 525 per cent., or four times that of the German and eight times that of the French. Please at least remember that, while a hundred years ago French or German was the native tongue of 50 per cent. more people than spoke the English, now English is the native tongue of more people than both French and German peoples combined. While French is the diplomatic language of the world, English is the commercial language of the world, and no less an authority than Mr. Sadler, of London, who is to address us tonight, told me in conversation that, just as Latin has been the diplomatic language of the past and French that of the present, the diplomatic as well as the commercial language of the future, in his judgment, will be the English. Is not so vital, so widespread, a language worthy to be known in its historical relations? President Butler, of Columbia University, last evening called our attention to the importance of not allowing the English Bible to fade from our literature, because it is the basis of allusions in literature from Chaucer to Browning; and by the same analogy the basis of two-thirds of our native language should not be allowed to slip from our education.

To the gentleman who suggests French and German as a substitute for Latin and

Greek, I would say that they do not produce the results and discipline which are derived from the ancient classics. An electric spark between points separated by feet indicates a more powerful current than when the separation is measured by inches. So with translations. It requires greater effort to bridge the difference between the ancient languages and English in an accurate and elegant translation than it does to bridge the difference between the modern languages and our vernacular. If, as has been charged, improper helps are used by pupils, it is largely the fault of the teacher. The work required to learn Latin and Greek has its beneficial effect. Again, I regret to say, the average teacher of French or German, especially if he is himself French or German, does not secure the results with pupils which our teachers of Latin and Greek obtain. It is more difficult to get real work out of pupils with modern languages, and it is the work that tells. Tho an English teacher, I wish to bear my testimony to the dependence of English upon the study of the Greek and Latin classics.

ALEXANDER STRACHAN, superintendent of schools, Deadwood, S. D, said, in substance, that the student is aided in mastering language by the study of the classics, but gets little value as far as literature is concerned. He could get more literary training from reading good translations of the classics. German and French should be substituted for Greek. Students do not need to study Latin and Greek to become proficient in English. The basis of our civilization is Latin, Greek, and Hebrew. Why not put Hebrew into our courses of study, as well as the other two? If they are necessary, then is Hebrew necessary. Our civilization is Greek in spirit, Roman in law, and Hebrew in our religious life. We now get the spirit of all these thru translations.

P. M. HUGHES, of the high school, Washington, D. C., said, in substance, that nothing in the whole high-school course does so much for the spiritual side of life as the classics. We should round out our courses so that no student will get a "snap," and give each that course that will make the best man or woman. Greek seems to be running out, but the Latin is becoming more popular.

HORACE GOODHUE, dean of Carleton College, Northfield, Minn., said, in substance, that courses of study are known by their fruit. The classically trained have shaped the life of the country. The leaders in politics and commerce have been for the most part classically bred men. This is true of the House of Representatives, of the Senate, and Supreme Court of the United States. I fear for the future results of this falling away from classical study.

H. F. CUTLER, principal of Mt. Herman Boys' School, Mt. Herman, Mass., said, in substance, that the great Dr. Arnold used to tell men who asked him what benefit the study of Latin would be to a boy that the question is not what your boy will do with Latin, but what will Latin do for your boy?

EDWIN TWITMYER, principal of the High School, Seattle, Wash., said, in substance, that colleges and universities are responsible for eliminating Greek, because they accept modern languages in lieu for entrance. There is no tendency to eliminate Latin in the far West. There will be no action in favor of Greek as long as colleges accept the modern languages.

J. J. DOW, superintendent of School for the Blind, Faribault, Minn., said, in substance, that higher institutions are responsible for high-school standards. The A. B. degree should not stand for any course which does not include Greek and Latin. It is unfortunate that many leading institutions are granting the A. B. degree for all courses. It is a mistaken policy, and will lower the standard of scholarship. I hope other colleges will not follow the lead of the university in this respect.

BIOLOGICAL CONFERENCE

LEADER, J. REMSEN BISHOP, PRINCIPAL OF WALNUT HILLS HIGH SCHOOL, CINCINNATI, O.

TOPIC — BIOLOGY AS A MEANS OF INDUCING THE PUPIL TO THINK

[REPORTED BY C. D. BAKER, EAST HIGH SCHOOL, MINNEAPOLIS]

ARTHUR G. CLEMENT, inspector of the University of the State of New York.—It seems to me that this subject of biology is one of the very best subjects that can be brought before a student to lead him to think. Now, thinking consists in observing and comparing and arriving at a general conclusion. Biology necessarily deals with the subject-matter of botany, zoölogy, and physiology. I have found that students learn to compare and observe by studying insects. I think it a better way to induce the high-school student to think than to have him begin in the logical way of commencing with the very lowest forms. I would therefore first introduce the high-school student, or even the grammar-school student, to insects, giving him two or three, and having him compare their structure. He can also study the homologies between different insects, like the homology between the tongue of a butterfly and the maxilla of some other insect, which he will find extremely interesting to do. The other way has also been tried in the state of New York — of beginning with the very lowest forms of amœba and going on up in the grade of life until we arrive at the higher orders. If the pupil continues his study long enough, of course he must necessarily arrive at some ideas of the evolution of organic life, and that brings him at once to the study of evolution in general. We all know that the principal of evolution is most thoroly taught and best taught in zoölogy.

JOHN V. CRONE, State Normal School, Greeley, Colo.—I like the idea brought out by the last speaker with regard to teaching biology by beginning with the lowest forms of life, but I do not agree that we should begin with insects. I wish to say a word for the birds. Thru the study of their habits we can teach the fundamental facts of the theory of evolution. I think we ought to begin the subject of biology with the study of the birds, their habits, the nest and eggs, and then, perhaps, their structure.

OLIVER S. WESCOTT, principal of Robert A. Waller High School, Chicago, Ill.—I wish to say a word for the bugs. I think these two gentlemen are both on the right track. I think the teacher in zoölogy, or any of these subjects, should take for the starting point the material that he is most familiar with, and that, no doubt, is what these two gentlemen are doing. By that means they run no risks and make the subject altogether the more interesting. It seems to me that this is exactly the channel in which we should all work. My present teacher in biology begins with the bugs, but he at the same time makes use of the birds. Last year in Lincoln Park, in Chicago, the pupils in the second year of the high school over which I have the honor to preside identified 152 species of wild birds, a number almost incredible in the midst of a busy, bustling city. But I do not think it is quite fair to the bugs to say they are uninteresting — that they are less attractive than the birds. It simply indicates a sort of feminine phobia of some kind in regard to things that have not been so extensively or thoroly investigated. I have not found it difficult to interest children in insects of any order or condition.

MISS GERTRUDE GIBBS, High School, Everett, Wash.—I think that the subjects for the study of out-of-door biology depend entirely upon where one lives. When I taught in North Dakota I thought the boys and girls ought to study gophers, and when in the Minnesota lake region there were the lakes and the ponds. Since going to Everett, Wash., we have Puget Sound, and the boys and girls bring in plenty of starfish and other salt-water animals. This spring I had the rare pleasure of taking fifty of my boys and girls to Sunset Falls, forty miles up into the mountains, and the things they saw and noted were well worth seeing. They got a great deal out of it. I feel that our work in the secondary schools is to get the pupils out of doors and to notice the haunts and habits of animals. In the woods, have them turn over the logs and stumps for subjects, and, if teaching on the prairies of North Dakota, study the gophers; if at the seaside, the various forms of sea life.

W. D. Grove, Ferguson, Mo.—I like the idea of beginning with the forms of life which are near at hand. If we live in the land of crocodiles, let us study the crocodiles. If we live in the land of grasshoppers, let us take up grasshoppers, and make the most of them. Education, it seems to me, is that which enables one to become familiar with the things in every-day life. Last fall my class began on the grasshopper, because the grasshoppers were plentiful at the time. We put in about a week or so on the grasshopper. One day a terrapin happened to cross our school yard, and the boys captured him and brought him in, and we immediately left the subject we were on and took up the subject of terrapins and turtles, and in a little while there was something like a dozen brought in from all over the country, until we had plenty of terrapins and tortoises and turtles. We have taken up the earthworm, which the girls do not regard with such abhorrence after we have studied it awhile. If the study of biology does not do anything else, it teaches the boys and girls at least to open their eyes and observe some of the peculiarities and beauties of nature.

Julia B. Clifford, East High School, Minneapolis, Minn.—The biology and science teachers who are here now, I think, consider themselves as pioneers in the work of teaching biology, both botany and zoölogy, as a science. We think if we give up the study of structure that we are certainly going backwards, and so we are trying to carry on the study of structure at the same time that we carry on the study of ecology. We do not know yet just what we are going to do; but we certainly are not going to give up the study of structure. As far as my own experience goes, the trouble has not been in getting the pupils interested. What I have had trouble with is leading the board of education and the principal and the people to recognize that I am teaching a science that is valuable to the pupils.

Just how a subject strikes the pupil at the beginning is not the main thing. I do not pay very much attention to whether the girls are going to be squeamish over the bugs or whether they are going to get over it; I know they will. If I feel that the time is favorable to begin with insects I begin with insects. But I am all the time trying to teach the pupils the principles of evolution; all the time I have in mind that that is what I am doing rather than giving the pupils a knowledge of the special parts. I do not think it makes very much difference whether they know the length of a bird's primaries or secondaries or the length of the bill, but it does make a great deal of difference whether they see that all these things have a very deep meaning, and that everything they study has a deep meaning for them.

As has been said before, I think we take their general knowledge of evolution too much for granted. If you go thru any community you will find that with the majority of people evolution means that man has descended from a monkey, and it does not mean anything else to them. In my work we are trying to counteract that, and to lead our pupils to understand that evolution touches every phase of science.

This coming year our course of study is to be changed to a certain extent. Botany is to have a much more dignified place than it ever has had. We have made a strong fight for both zoölogy and botany. We have gained something for botany, and we hope in a few years that we will secure a place for zoölogy. Physics is the one science that has always had a dignified position in these schools until this year. You may not all agree with me that this is right, but this is what is to be done: botany and physics are to be optional (one required) in our course of study for the coming year.

Physics has been well taught as a rule in all our high schools. Every pupil has been required to take physics, and it has been a good deal of a bugbear to most pupils. Now we expect this year that the weaklings and culls, because they have the privilege, are going to swing around to botany, and we are going to present such a strong course in botany that that will not happen again. For a good many pupils a course in botany can be made just as good training as a course in physics; but ought we simply to entertain and interest, or shall we go on with the idea that we are going to teach botany as a science, that we are going to teach it in such a way that the pupils will feel that there is good, solid hard work there for them every school day in the year, and that they have something every school day to accomplish — not something set before them to be looked at, but something which they must work out for themselves? If it is experimental work, ought it not to be just as hard and trying, the data to be taken and the results recorded just as carefully, as in similar work in physics? Can we, by giving up the study of structure, teach the scientific principles which we know are back of that? Ought we not to keep up that part of the work as well? We give a year to botany, but the time which we get in the different high schools is not the same. We have simply assumed in the high school where I teach that we must have eight periods a week for the subject. I have simply taken the ground that nothing else will do. I think teachers can get at least that much time, and as I see my way clear, where I think it can be done, I am going to take ten periods.

MR. BISHOP.—I do not see why one subject should be regarded as less dignified than another. What is there in a subject which would make it more dignified than any other? We used to think Latin and Greek had certain dignity, because they were so old, but otherwise I think this idea, which has sprung up for some unknown cause, ought to be discarded everywhere. I think probably the most dignified subject in my school is botany, because if there is any question of dignity it would apply to the magnificent trees.

MISS CLIFFORD.—I do not mean to say that I consider a subject lacking in dignity, but I do say I want it to have a dignified place in the course of study; and by that I mean it should be recognized — have just as much value as one of the mathematical sciences.

W. D. GROVE, Ferguson, Mo.—I will tell you what is wrong here. The trouble is due to the fact that the departments are competing with each other. Now, we measure the value of botany by these terms: Can I, as a teacher of botany, demand and secure as much work from my pupils as the teacher of mathematics or the teacher of physics, or the teacher of Latin and Greek? We should base our claim upon the amount of interest we arouse in our pupils, and try to lead them to realize the value of the work to them, rather than that other kind of thing which we call class-room pressure. We say we feel better when the principal of the school is in sympathy with the work, but that, in some cases, would be an unfortunate condition, because he might be too much interested, or think he knows too much about it. The great essential in teaching botany or zoölogy is being left alone, so let us be thankful that we are as free as we are.

MR. WESCOTT, of Chicago.—I arise to ask the lady (Miss Clifford) a question. I would really like to know whether the arrangement of the courses in Minneapolis is such that physics and botany, being optional studies, may both be neglected by pupils who are graduated from the schools.

MISS CLIFFORD.— No sir, they cannot.

PHYSICAL-SCIENCE CONFERENCE

LEADER, W. A. FISKE, INSTRUCTOR IN PHYSICS, HIGH SCHOOL, RICHMOND, IND.

TOPIC — PHYSICAL SCIENCE IN THE HIGH SCHOOL

MR. FISKE, the leader, introduced the topic as follows:

Physical science as we find it today in secondary schools is the result of a steady evolution. A quarter of a century ago it was taught mostly in a didactic manner, with no thought of a laboratory, and with but little experimental work in the lecture room.

The illustrations of the text were examined and carefully discussed. Later, when apparatus became cheaper and was more accessible to the average school, experimental work for illustrative purposes was made a part of the daily recitation. Finally, the laboratory was introduced, which added a decided interest to the work and made it much more valuable to the pupil.

All experimental work was at first qualitative in its nature, and inductive methods of presentation were largely employed by those having the work in charge. Recently inductive text-books have been considered out of date, and, to maintain their place in the field, of necessity have undergone a careful revision.

Thus we see that the methods of presenting these subjects, and even the tools with which the work is done, are not fixed, but are subject to wide variations upon the inception of new ideas. That is why we meet here today for the purpose of discussing these subjects in their various phases and obtaining for all the best that each one has to bring.

The relation which the physical sciences bear to certain other subjects of the curriculum is one of extreme interest. As the most important of these, mathematics, English, and drawing may be named.

There was a time when physics and chemistry, instead of being mathematical, as at present, were more philosophical. The problem in physics was but little known, while much time was spent in reasoning upon obvious natural phenomena. It is not so now. The text-book on these subjects, especially physics, that is not rigidly mathematical is looked upon with some doubt as to its being the proper one for use in the upper classes of our secondary schools.

In view of this condition of things, it is of advantage that the department of mathematics recognize the needs of pupils beginning the subject of physics. The hare and hound style of problems in algebra is in a measure being displaced by those of a more practical value — by instruction and drill upon principles that will be of far more advantage further on in the course.

It frequently happens that a pupil having three terms of algebra and one or more of geometry is tripped up on the solution of a simple equation in the subject of physics. This, however, is not a fault of the teacher of mathematics any more than of the teacher of physics. The fault, we believe, lies in the fact that the pupil is permitted to regard the subjects of mathematics and physics as two separate and distinct things, with no relation whatever existing between them. The pupil has finished his mathematics, as he thinks, and begins the subject of physics, to him a new field, little thinking he can use the old knowledge to continue his work.

The same close relation should exist with the departments of English and drawing, because of the great value of each to the work in physics, while the latter may be made most helpful to the work of these two departments.

There seems to be a growing tendency in some schools to make the work easy, as it is called. A teacher the other day said: "I have one child, and if she passes in her work and has a good time while doing it I shall be satisfied." If "a good time" means a thoro entering into the spirit of the work, a high appreciation of all the school is able to give, and a proper bearing under its rules and regulations, the statement may be an appropriate one; but if the ordinary meaning of "a good time" is understood, this is certainly not the proper attitude to take. It vitiates the school and inculcates in the mind of the child improper notions of life. The school is not the place to have "a good time," but a place where one may come up against difficult things. The work should have enough of severity about it to command the highest respect of the pupil, and at the same time should be made so interesting and attractive by the teacher that it will be a pleasant rather than an irksome task.

A few, it is true, do fall by the wayside, but such results, upon investigation, are nearly always found to be due to outside disturbances, rather than to good, wholesome, and well-regulated study.

The work of physics and chemistry, then, should be made serious. It should mean something. The laboratory should be made a place for working out good, substantial results, and not a place of amusement. To this end the work, especially in physics, should be purely quantitative in its nature, in which case the pupil will have greater respect for what he is doing, and will find greater pleasure in it because of the definite results he is able to obtain.

The voluminous condition of the majority of text-books is a problem with which the teacher has to deal, and unless a judicious pruning is resorted to the work cannot be efficiently done. This is especially true where one-third to one-half of the time is devoted to laboratory work. An attempt to cover too much ground in one year, either in the laboratory or class-room, is, we believe, a serious fault, and one which results in many bad habits on the part of the pupil. The work is poorly done; much of it is unfinished and unmastered; the pupil fails to appreciate the importance of the subject, and falls far short of one of its prime purposes — the development of a scientific attitude of mind. The aim, we believe, should be to spend the time allotted to a given subject upon the most important parts of the text, and then use all possible means to have the pupil appreciate and master the work assigned him. What these most important parts are is involved in the first question for discussion this afternoon — the proportional amount of time in a one-year's course in physics to be given to the following subjects: Mechanics, heat, sound, light, magnetism, and electricity.

There was a time when I felt that the greater portion of the school year should be spent upon electricity, but I do not think so now. I do not know what others think, but it seems to me from my own observation that the best results are obtained from a careful study of mechanics and heat; therefore, it might be well to spend at least half of the time upon these two subjects — a fourth of the time given to a thoro consideration of the general principles of sound and light, and perhaps about as much time on electricity as upon the last two.

WILLIS E. TOWER, instructor in physics, Englewood High School, Chicago.—I agree with our chairman that mechanics and heat should occupy half the time, but I am not quite ready, however, to give electricity any less time than is given to sound and light. I cannot discuss this outline as I should like to, since I am sure it would interfere with what others have to say. I should like, therefore, instead of discussing it, to make an announcement that there was formed last month a Central Association of Physics Teachers, along the line of the Western Association of Physics Teachers. Many of you doubtless know of this, and perhaps some of you were present at its formation. And some of you are familiar with the new publication, *School of Science*. The editor of *School of Science* is the secretary of the association, whose president is Chas. H. Smith, of Hyde Park High School. Its first regular meeting is to be held next Thanksgiving vacation at the Mining Institute, Chicago, and among the speakers will be Professor Carhart, of Michigan. I believe this Central Association of Physics Teachers will be of great assistance to physics teachers in secondary schools and colleges in getting together along the right lines of physics teaching.

F. L. **Barker**, teacher of chemistry, Duluth, Minn.—I would like to raise a protest against teaching qualitative analysis in chemistry in the high school. It seems to me it is entirely out of place. In the first place we cannot teach very much of it, and in the second place, to those who are going to college it will be of no advantage, for they will immediately have to take the same work over again, and those who are not going to college cannot get enough to amount to anything. In many of our states we have large mining interests. The development of these, and the chemical problems that confront the mining engineer or the pupil who has any interest whatever in mining work, are of prime importance; and that teacher who is so situated that he can teach pupils in a mining country has an opportunity not to be neglected for practical work along the lines that are of great importance to the pupils. On the other hand, if one is teaching in a manufacturing country, there is a great field open for manufacturing chemistry and the practical application of chemicals to everyday life. Enough work can be given to cover two or three years of general chemistry, with all of the practical applications one might make. We hear a great deal of industrial education, but it seems to me that the man who is teaching chemistry has the best chance in the world to give industrial applications to his work.

Miss **Jessie** F. **Caplin**, teacher of chemistry, Minneapolis, Minn.—There is one statement about qualitative analysis made by the last speaker to which I must object. You say the pupils must take the work over if they go to college. My experience has been, and I send from 90 to 150 of my pupils to the state university, that the general chemistry in the university is a great deal stronger because they have had qualitative analysis before. Of course we cannot take anything but the simplest reactions, but that makes the subsequent work that much easier when they reach the university; and therefore they can expend that much more strength on the more difficult reactions.

Mr. Fiske (in reply to a question).—The nature of laboratory experiments, in physics, I am convinced from experience should be quantitative. There may be a few qualitative experiments introduced, but there is not that opportunity for thought on the part of the pupil obtained from qualitative experiments in the laboratory. The time in the class-room, according to my notion of the matter, should be partly taken up with qualitative experiments to illustrate the work. The number of laboratory experiments required should perhaps be as many as thirty-five or forty during the year. If this number of good quantitative experiments is worked by the pupil in the laboratory during the year, he is doing pretty fair work in that subject.

Some people do not believe very much in reviews. That may be true with older pupils, but with younger pupils it is well to review often. As far as examinations are concerned, I hardly ever give any. I try to impress upon the pupil's mind that his interest and enthusiasm in the work are the main factors upon which I depend, occasionally giving a test on some particular phase of the subject. But what we call real old-fashioned examinations I haven't much sympathy with.

Question: You say you give no tests or examinations. Do you attach any importance whatever to the mathematical problems in connection with these different subjects?

Answer: Yes, very much. The subject is very nearly all mathematical. As I stated in my opening remarks, modern text-books, or at least the best ones, are mathemathical, and that is the kind of text-book I believe in. But to set aside a certain time at the end of the month, or at the end of six months, or at the end of the year, for a good, long, stiff examination to cover the whole subject is in my opinion not altogether the best plan.

H. A. **Britzius**, teacher of physics, Central High School, Minneapolis, Minn.—I should like to have a little more information as to the time that should be given, respectively, to laboratory and recitation work; and to bring up the subject I am willing to state about the time given in the Minneapolis high schools. We try to divide equally the laboratory and recitation work. While I believe in reviews, I find that my time is so limited that I cannot give much of it to reviews, but I believe in taking tests in which the student is obliged to cover a specific part of the work we have gone over and be prepared on anything that may come up under that part of the subject. I do not believe in giving them credit on tests alone. I generally aim to have the recitation count for about half and the test for half, as my experience is that, while some students seem to be bright in daily recitation, their memory is weaker than that of others, and so when the test comes, unless they have very thoroly prepared, I find they have forgotten some things. Some are good talkers and others are good writers, and vice versa.

F. E. GOODELL, teacher in high school, Des Moines, Ia.— In this connection I should like to ask just what the tests should be, whether in the nature of questions or problems? My own practice is to include a large number of problems in these tests. I believe problems bring out principles and prevent memory work, which is the same in all science work. If the pupil can get the problem, he is almost sure to have mastered the principle involved in that problem; he cannot solve it unless he has. So that I, in testing pupils' ability, seek, as far as I can, to select such problems as will cover the subject most thoroly, and which will bring out their grasp of the principles involved.

Question: Where should the qualitative work of physics come in?

MR. FISKE (in reply).— The place for qualitative experiments is certainly in the class-room. Occasionally it is advisable, it seems to me, to work a quantitative experiment in the class-room, but that cannot be done very extensively, because of the lack of time; but to illustrate the subject-matter of the text, it is essential that this be the place for qualitative experiments. It is true that the number of qualitative experiments cannot be very great, because of the lack of time. It takes a long time in the class-room to work very many experiments, and the average text-book is so full of them that it is almost impossible to work all that are given; but the chief experiments in the text-book, and many that are not, can be introduced to illustrate the subject under discussion.

Question: Did I understand you to say that the qualitative experiments should be worked chiefly in the class-room, and the laboratory experiments should be quantitative?

MR. FISKE (in reply).— That, I think, is the proper way.

MISS KATE WYMAN, Northfield, Minn.— If mechanics and heat occupy about half the time devoted to the subject, and electricity the other half, what is to become of the rest of the work? On account of the size of the subject, it would be impossible, perhaps, to omit one of these topics given under physics.

P. S. BERG, teacher of science, Larimore, N. D.— I think the leader is correct in stating that half the time should be given to mechanics and heat and the other half to the study of electricity, sound, and light. We all know that magnetism does not occupy a very large part of the text-book commonly used in the public schools. We further know, upon careful inquiry, that physics is a unit, and not an aggregation of many disassociated subjects. When the pupil gets the proper conception of motion, conservation of energy, correlation of energy, electricity, and a few other things, he has physics; in fact, conservation and correlation of energy are at the basis of the entire subject. Now when the pupil has thoroly learned mechanics, has not that pupil the basic knowledge for working out sound and light, and in good part electricity? When a pupil gets a good grasp of these things the others are easily mastered.

There are a few things not mentioned in the outline; for instance, the time at which physics should be offered. I find in my experience that it would probably be best if physics were not offered until the last year in the high school. I get from the drift of remarks made here this afternoon that a great many problems should be given. I heartily agree with that. No pupil can ever get into real physics unless he is more or less the master of arithmetic, algebra, and geometry; so these subjects, I think, should precede physics; and if they do, physics probably ought to come the last year in the high-school. How can the pupil ever master specific heat and latent heat and perform the quantitative experiments and solve the problems which underlie them unless he has a well grounded knowledge of algebra? On the other hand, how can the pupil illustrate the principles in connection with light unless he has some knowlenge of plane geometry? So I hold that after geometry, algebra, and a thoro knowledge of arithmetic, physics can be made much more interesting and profitable.

Another thing that has been touched upon this afternoon is the order in which the experimental, laboratory, and theoretical work and problems should come. This is my order: The theory first, after that the experiment to illustrate the theory; after the experiment, the problems to illustrate the experiments and the theory, or to strengthen what has been learned before. I hope to hear from others, both upon the time that physics should be offered and what we shall give first. Shall we first give the theory of the subject, and then follow that with experiments, and then with problems?

C. D. **Barker**, teacher of science, high school, Duluth, Minn.—I have been requested to speak on the first topic in chemistry, "Theoretical Chemistry, When Presented, How Much, etc." If I were essentially a teacher of physics, I presume I could agree with the last speaker and feel that physics should be given in the senior year; but as my subject is essentially chemistry, I believe chemistry should be given in the last year and for the entire year. I am perfectly willing that those who wish to give qualitative work the latter part of the year should do so, but for myself I give the pupils so much more in theoretical chemistry and the applications of it that I have no time to give to the qualitative work.

I should by all means give the experiment first. In teaching chemistry I believe we ought to approach the subject in the theoretical way in which chemistry has been developed.

For my own part I should first present oxygen, and when that one subject as an element is thoroly mastered I should stop and develop a certain number of laws from that. Then I should take hydrogen and the union of oxygen and hydrogen, and more laws sandwiched in between. The first half of the year I should not attempt to get any farther than the four subjects of oxygen, hydrogen, chlorine, and nitrogen, at the same time bringing out almost all of the principles of theoretical chemistry. If there is anything new on the subject let the pupil have it; give him the latest and the best, always guarding the point that it may be simply a theory; that there is nothing absolutely certain about it; that the facts may bear out this theory, but that it still is theory, nothing more. The recent theories I believe can be presented to a class with a reasonable degree of safety, if there is a reasonable degree of care.

Mr. Fiske.—One of the recent theories that I believe is referred to here is the ionization theory. In correspondence with some of the teachers of the east, I learn that they do not think very much of that theory, and it was stated that the pupils were not able to get much out of it; but in correspondence and conversation with some of the western teachers, especially some of the Chicago teachers, I find that they think a great deal of the ionization theory, and feel that they see more in it.

W. E. **Tower.**—I want to emphasize that I believe the ionization theory is one that can be presented with a great deal of profit by high-school teachers. I have found it so, and thoroly believe in presenting it. However, that as well as other theories I should present at least in the last half of the year, and, better still, the last third, rather than before. It is all right to present laws in the first half of the year. I would put those in just as has been stated, but when it comes to theory I would emphasize that in the last third rather than before. Then you have the facts based upon quantitative experiments, which ought to be included in every high-school course.

Mr. Fiske.— While I believe that physics is distinctly a mathematical subject, yet I further believe that some history should be worked in as well. Physics deals with Boyle's law and the laws of Newton, and to teach about these laws, and not about the men who formulated them, seems to me to leave out something that is important. Almost any history of science will give us a great deal of information on these biographical subjects. And I believe it is well to present just as much as we have time to present. This work can be assigned at the time of the recitation, and the matter worked out at the pupils' leisure.

Question: I would like to ask how much time you devote to laboratory work in the week, and how much to recitation work?

Mr. Fiske (in answer). — I have five hours a week in physics. I am allowed that much time—five periods a week of forty-five minutes each. That is not enough, but three of those periods are spent in the class-room and two consecutive periods in the laboratory.

Question: Do you not consider that enough?

Mr. Fiske.—I do not believe five periods a week is enough for a class of juniors in physics.

Question: May I ask you then if three periods of recitation and two double periods a week in the laboratory would be sufficient?

Mr. Fiske.— That would be better, yet I would prefer a little more class-room work. If I had seven periods I believe I should take four of them for class-room work and three for laboratory work, taking perhaps one period of the four for a special discussion of the work done in the laboratory.

Question: What would you do with the other three days?

Mr. Fiske.—They might be spent upon recitation work and lecture work.

Question: Where do problems come in ?

Mr. Fiske.— I do not think it advisable in secondary schools to take a whole period for lecture purposes, but a portion for lecture purposes and the remainder for recitation and problems.

Question: Will you have more problem work with electricity or mechanics?

Mr. Fiske.—I find in my experience that I obtain better results in giving the greater number of problems from mechanics and heat, tho there is a great field for that kind of work in the subject of electricity.

Question: Now, as to one of your questions here in the third division (physics and chemistry — supervision of laboratory work, relation of teacher to pupil during working period), what advice have you to offer?

Mr. Fiske.— I think the teacher during the working period should be right there with the pupil; at least where he can know positively what the pupil is doing, and where he can be at the pupil's command. I do not make it a business, when I am in the laboratory, of passing around from pupil to pupil all the time. It is not necessary to do so. You can tell what they are doing and not be right where they are. If I see somebody in trouble, who is apparently not doing what he should do, then I am where he is; and if he gets along all right with his experiment, and finishes it, he comes to me, and we look it over together. If it is satisfactorily done it is accepted and he is given another problem; and if it is not, the mistake is pointed out to him and he cheerfully goes back and corrects it—offers to do that in a great many cases, the majority of cases, without being asked to do so.

Question: Do you give out problems for pupils to take home and solve, outside of the laboratory problems?

MR. FISKE.— I very often do so.

Question: How many do you take charge of in the laboratory?

MR. FISKE.— I think fifteen is a large enough class for anybody in the laboratory. I have had some difficulty in holding it down to that point, but I have been able to do it so far. I won't have more than fifteen in the laboratory unless I have to.

MR. GOODELL.— Now, in connection with the laboratory notebook, the most important point with me is the time and place of making the record, and just how much of a record it should be—whether just the data taken in the laboratory, or the results which are worked out from these data, or, still more, a discussion of the experiment. Whether the laboratory notebook should be only one book, or whether it should be first an original book or report handed in, and finally a finished book written in ink and carefully prepared. I know there is a great difference of opinion on that point, which is one well worthy of discussion.

MR. TOWER.—In physics, during the last two years, I have had the pupils write in ink permanent notes at the time the experiment is performed, and find that while there is perhaps the disadvantage of a thoro review outside of the experiment in writing it up in permanent form at home, yet there is not only a great saving of time, but also a training in accuracy in putting down in proper form at the time the observations are made the exact results of experiments. Many pupils have to make two or three trials before getting a thing right, but if we can get them to do it right at first it will be very helpful to them. I find that making notes in permanent form in the laboratory has brought about this result to a certain extent.

F. F. FARRAR, White Bear, Minn.— If the theory precedes the practice, then in writing notes under your plan do you have the theory thoroly explained before letting the pupil try the experiment, or do you believe in the inductive method to a certain extent?

MR. TOWER.—I use no one method for all experiments. It depends also on the experiments. Some require explanation at the beginning, and some the pupils understand well enough themselves. They need a little help, of course, in a certain way, at the time the experiments are performed.

MR. FARRAR.—It seems to me that if permanent notes are made at the time, they should have the subject quite thoroly mastered before taking them.

MR. FISKE.— The place, it seems to me, to write notes is in the laboratory, just when the whole matter is red-hot. I have had a little experience in allowing pupils to take notes out of the laboratory. They get behind on their notes three or four experiments; and then, more than that, after those notes have (as I have sometimes called it) become cold, they cannot do justice to the experiment. The time to write notes, it seems to me, is at the time the experiment is performed. There is some objection to that, which need not prevent us from having it that way, however, and that is that it takes a little more time. It is hardly just to make a few notes and then write up the experiment afterward. I would prefer not to have so many experiments worked, and have them finish them before they leave them, because I believe better results can be obtained.

WILLIAM E. ANDREWS, Taylorville, Ill.— I believe I have detected something of the craft of the college professor here this afternoon, because it seems to me there is a disposition to keep the notebook in good form. That is proved in the discussion when one says the pupil's work should be well wrought out before he writes it down, if the notebook is to be made permanent at the time. Now, in my opinion, we should pay no attention to the statement in the university catalog that the pupil's notebook will be required. We should not, at least, pay so much attention to that as to lead us to try to get up a fine-looking, errorless notebook that will be damaging, highly damaging, to the work we need to do. In my opinion, it would be better to have the pupils write out in the laboratory, to the best of their ability, the work which they have done. Then have those notes carefully examined and errors indicated, and record made, of course, if you care to keep a record. Let those leaves as they have passed thru the teacher's hands, with the errors indicated, be the permanent notebook of the pupil. The place where the notebook is to be prepared should be in the laboratory. There is only one reason for making a notebook, and that is to keep the pupil thinking, and he needs to do this when he is with the apparatus and can get answers to questions that the note taking will cause to arise in his mind. So I think this plan is a good one: Do not try to get a fine-looking notebook so that you may be rated high by the college professors, for if you undertake to get a notebook that is a creditable looking one you are going to defeat the purpose of the work.

You know that the bore of the science teacher's life is reading the same old stuff in the pupils' notebooks year after year and sheet after sheet, until it is perfectly nauseating. Dr. G. Stanley Hall has said that if we would stay up more in the daytime to prevent errors we need not stay up so much at night to correct them. Now, the thing that bothers me most in science work is this awful question of being deluged with papers — what to do with them. How can we get the very best effort of the pupil on the papers so as not to have to spend all the very best time of our lives correcting them?

MR. FISKE.—I should like to emphasize the point brought out about saving the teacher's energy and strength, and not having so many notebooks to look over. I believe we owe it to ourselves and to our pupils to be more than mere machines in this matter. I think if we spend our time in the evenings on anything, and we certainly should, it should not be notebooks or papers in relation to our school work, but it should be something we can take to our class next day that will give them food for thought and put them on a higher plane than they were the day before. There are teachers who are killing themselves — dragging out their lives looking over notes and papers, especially teachers in English and the languages; and sometimes I feel sorry for them, carrying home whole loads and stacks of papers to be examined that individual night. It must be done before the next morning, and the teacher ought to be free. He cannot afford to do these things. Something must be done to economize the time and get the matter in a nutshell, so that we will have more time for freedom and thought along different lines than those we are grinding over in the daytime. I never take a notebook home. I look them over, as I said a moment ago, just as soon as they are done, and then I am thru with them.

HISTORY CONFERENCE

LEADER, CHARLES R. FRAZIER, SUPERINTENDENT OF SCHOOLS, LITTLE FALLS, MINN.

TOPIC — SHALL COURSES IN EUROPEAN HISTORY BE GIVEN PRECEDENCE OVER COURSE IN ENGLISH HISTORY?

[REPORTED BY SUPERINTENDENT H. S. HILLEBOE, BENSON, MINN.]

The leader introduced the topic as follows: There is in my own mind a tendency to think upon the *how* of teaching history, rather than the *what*. The pedagogy of the *what* is here, however, as it is to a greater or less degree in all subjects, very important. Our new books on pedagogy are going to deal more and more largely with the subject-matter of instruction. It is as far wrong to say, "it does not matter what one studies, but how he studies it," as it would be to say, "it does not matter what one eats, but how he eats it."

The problem of selecting from the "thick book of personal experiences" of which history is composed *what* shall be taught is a double one: First, it must be decided what periods of the world's history shall be studied; and, secondly, within these periods what few fibres may best be selected from the intricate mesh of truth in order that they may be woven into a profitable fabric.

To the first of these only would I direct your attention; nor shall I undertake this except perhaps to make a plea for a better recognition of the value of courses in the mediæval and modern periods of European history. Since, in harmony with the best thought upon the subject, we have split up our general history into natural periods and divisions to which we devote a more exhaustive study than had been possible, there has been a tendency to jump from the history of Rome to that of England, and thence to the history of America. This leaves almost untouched practically all the history of continental Europe for fourteen hundred years. No one questions the wisdom of studying the Greek and Roman civilizations, and there are few schools but give a course in American history late in the high-school course. My plea is that Europeon history shall be given a place in the high school somewhere preceding the course in United States history.

Why? In the first place the past of Europe is infinitely richer and more varied than that of our own country. It affords an opportunity to study the human spirit on a larger scale. And further, this period is rich in incidents and movements which aid directly in the interpretation of our own history. Tracing back the history of our own people into their earlier European environment, we soon come into the atmosphere of political revolution; divine right of kings; the free city with its local as distinguished from national patriotism; feudalism and ecclesiastical domination, which route, traversed in reverse order, serves as an excellent approach to our civilization. One who has once seen the connection between the serfdom of the Middle Ages and the slums of our modern cities will not think to deal with the slum problem without considering the long story of "the man with the hoe."

The local patriotism developed in the free cities of southern Europe as they emerged from feudalism led the way to that higher and better form, national patriotism, making possible a France, a Germany, an England, and an Italy. This throws light upon the two stages of progress illustrated by the states-rights South and the nationalized North during the time when there was a Mason and Dixon's line in this country. So, too, as the divine right of kings to accumulate a dangerous amount of political power was overthrown by the divine might of the people, we are able to see that the divine right to accumulate a dangerous amount of that power which money gives may have to be overthrown by the people in self-defense. It is difficult to see how the analogy between the struggle to limit the political power of kings and the struggle to limit the dangerous accumulation of money power under one irresponsible management can be missed. Nor do I see where in all history can be found a more potent argument for wise dealings with corporations, trusts, and mergers than is found in that series of supreme struggles which characterized the eighteenth and nineteenth centuries, by which the masses taught the classes that their rights must be respected.

And so, instances might be cited at great length to justify the statement that European history is rich in the power to throw light upon the interpretation of our own history. It is not meant that the facts of history gleaned from the past form a basis for infallible predictions for the future, but rather that, as cause and effect, defect and remedy, bear similar relations to each other at all times, a proper and a scholarly interpretation of our own American history can be obtained only thru a knowledge of the past of Europe, this knowledge not to make of us pedants or prophets, but to contribute to wisdom and understanding.

One more reason, and the best one, for giving European history a place somewhere preceding the last course in American history in the high school: With the purpose of giving young people a good appreciation of our own history, the teacher is apt to think the most direct way the best way.

Should we immerse ourselves and our pupils in American history to the exclusion of European history, we would be guilty of the grave error condemned by Paul: "They measuring themselves by themselves and comparing themselves among themselves are not wise." Our federal system can hardly be understood without a knowledge of the Swiss and German federal systems. Our Protestantism cannot well be understood without a sympathetic study of Catholicism at its best. The political, social, æsthetic, and religious movements must of necessity be interpreted in the light of contemporaneous European history. The pupil must come to see that we are not a peculiar people.

This lesson of cosmopolitan sympathy is probably the most important one which comes from a study of mediæval and modern history. I will borrow and condense a paragraph from Professor James Robinson, of Columbia University. He says:

> The most valuable thing in European history for us Americans is "the judgment which forms itself insensibly in a fair mind along with fresh knowledge," and this judgment almost any one with a fair mind, even the school child, if properly taught, may hope to attain to; for this judgment comes almost of itself, and what it displaces it displaces easily and naturally. Our whole place and mission in the universe come to look different to us as we view ourselves in the light of Europe's moral and intellectual achievements during two thousand years before the United States came into existence.

It may be urged that the study of English history will be a sufficient approach and background for the study of American history. This I cannot bring myself to see. In my opinion the purposes I have tried to set forth briefly are best accomplished by a course in mediæval, followed by a course in modern, history, in both of which emphasis is laid upon English history, rather than omitting either of these for the course in English history. Stories from English history may well find a place in the grades. This, with the course suggested above, best satisfies my sense of educational values, where less than a three-year course in history can be given.

DISCUSSION

PROFESSOR WILLIS M. WEST, University of Minnesota, agreed with the writer of the paper, and expressed the belief that we are going to have American history in our high schools; also that English history would be introduced into the high schools, and that we shall finally have European history as a regular subject.

History will never be well taught as long as it is a side issue. If we can secure the necessary time for European history, and get better instruction, the results will be more satisfactory. There are periods needlessly neglected — the period of Alexander and the period of the Roman empire. Teach those periods that have a direct bearing upon our civilization. We teach the Roman republic. Why not give the empire more consideration? We give the republic first place, not on account of its merits, but because we are introduced to it thru classical literature. Suppose we should treat English history the same way; we would then study the Elizabethan period only, and omit the nineteenth century history, which is of greater importance. Later periods seem more complex than the earlier, especially the way we teach the earlier period. Give more attention to the two periods of Alexander and the Roman empire, as a basis for European history.

SUPERINTENDENT J. A. VANDYKE, Fergus Falls, Minn.—There is no better field for outside reading than history. We do not make enough use of biography. More reference books should be secured. Use historical fiction, modern, mediæval, and also ancient. Take up a certain line of thought, work it out, as, for instance, the slavery question in American history. So the subject of Christianity could be treated in general history. Too little attention is paid to history. We have special teachers for science, for languages, for mathematics; but history is passed around to any teacher that happens to have a vacant period in the program. Let us have better reference books, better text-books, and better teachers.

SUPERINTENDENT J. RICHESON, of East St. Louis, Ill.—The strongest teacher ought to be the teacher of history. Then arrange a sensible course. The first year should be given to English history; second year to general history; third year to American history.

The reason for beginning with English history is that it is a complete unit. History as taught now is too often merely polite gossip. The students show no grasp of civilization. A great many pupils take history who ought not to be in the class at all. General history might even be omitted and as good results be obtained by putting two years on English history and two years on American history.

PROFESSOR E. V. ROBINSON, of St. Paul.—The speaker has wrestled with this question a number of years. He has defended the idea that instruction in history should begin with that of general history. This, in theory, is sound. History is a process of evolution, and in that process we must take all, or else the process will not be complete. The speaker then cited several examples to show that persons might know the special histories of some countries and yet not be able to connect them and make a uniform whole. But there are some practical difficulties in making general history the foundation for historical instruction. It ought to be taken in the first-year class, but when put there in the course it proved to be a slaughter of innocence, a plunge into cold water. Teachers who had adopted the plan found the results far from satisfactory. Better results were obtained when general history was placed in the second year and no history in the first. The change in the pupils from the first year to the second year was great. Second-year students were much more capable of mastering the difficult subject of history. The speaker next called attention to the fact that nearly all the text-books now on the market were not satisfactory. Original source-books and reference works were too often unsatisfactory. Source-books contained too short extracts, and taught the pupils to jump at conclusions from inadequate premises. The speaker preferred a few reference books, having a great number of copies on hand, so that all pupils could use them at practically the same time.

H. W. CALDWELL, University of Nebraska.—The high school is called the people's college. It gives a four years' course. It is desirable that it should increase the quantity of historical instruction; but what should be studied? What should the subjects be? The main object of all historical instruction should be to get the unity and continuity of history. General history should be used to furnish this connection. We need better teachers and better methods. Emphasize unity, and show the progressive development of civilization and national life. The speaker took for granted that all pupils had finished American history in the eighth grade, and were ready to do further work in the high school. Begin with Greek history and civilization, and put half a year to that work; then a half a year on Roman history; half a year on mediæval history; one-half year on English history; and devote the fourth year to American history. In the grades the instruction ought to proceed from the known to the unknown, from American history backward. In the high schools the process should be reversed. Beginning with ancient history the instruction should be brought down to the present day. In Latin a teacher was supposed to have six years' preparation, in science at least four years' preparation, but in history any one who had gone thru a small text-book was supposed to be a competent teacher of that subject, and the result was that the teaching of history too often became merely hearing recitations. Keep source material on hand; study the Declaration of Independence itself, and not what men say may be found in the declaration.

PROFESSOR GEORGE WELLS KNIGHT, of the University of Ohio.—The general experience of all teachers is that they have difficulties in teaching general history, and yet we all think that it ought to be taught. How about trying to teach it to immature pupils? No one is satisfied with the result. Must there not be something the matter with our efforts to give the pupils too large a quantity of history? Are we not in danger of spoiling their digestion? Teach well one period of history, rather than a faint glimmering of all civilization. The speaker believed there was a place for general history, but that place was after the pupil knows well the specific histories of two or three countries. For instance, Greece and Rome and England. Suppose a pupil leaves school having taken only these histories. The pupil would not stop learning. Those who go to college would get mediæval history there; the others would have to do without, or they would acquire it of their own accord. Teaching mediæval history or general history had been a failure in his state, and he understood it had been a failure in other states. Now, what were the reasons? First, the subject was too intricate in itself; second, the teachers were too weak. Boards require them to teach so many subjects that there would be some that they did not know; and general history was, as a rule, sure to be the subject that they did not know.

Professor George M. Smith, University of South Dakota.—The Germans have solved the problem of teaching history better than any other people. Their plan embraces, first, acquiring facts; second, the interpretation of the facts. The two must go hand in hand. We need to keep the historical facts in mind, but lay a special stress on the interpretation of historical phenomena. Learn essential facts only, and let the pupils try to interpret these.

Professor Pettinger, of Anderson, Ind.—The teachers had found trouble in Indiana. Specialists were clamoring for more time each for their own subjects. There was no general plan followed in history. The result was that no two high schools in the state of Indiana have the same course in history. The speaker thought that the main object in the study of history was to try to develop a historic sense, a sort of time relation. The speaker laid more stress upon the attitude of the pupils toward the study of history than upon the number of facts acquired. If the pupils were made to love history the results would be better, and this liking for history should be the main object in our teaching.

Professor Robinson, of St. Paul, explained his former remarks more fully. The speaker wanted to state definitely that sources and their use in the high schools were not derogatory to good study, but he objected strenuously to teaching history solely from sources. It would teach pupils to make unwarranted conclusions. High school pupils could not specialize.

Professor Dunn, of South Dakota.—The speaker had found lamentable ignorance of American history. One year ought to be given to English history before American history is taken up in the high schools. We are trying to deal with difficult problems in our own country, and unless we have the historical connection we fail to understand the questions. The building of reformed bridges can be done only when the bridges rest on solid historical foundation, at least with one end. Some reformers try to build bridges resting with both ends in air. We must have English history as a foundation for our American history.

Miss Spears, of British Columbia.—In British Columbia we eliminate about two-thirds of the matter in ordinary histories. We study some main parts, beginning with Alfred the Great, then the Norman Conquest, the Magna Charta, the Rights of Englishmen, the Hundred Years' War, the Wars of the Roses, the Rights of the Sovereigns, Charles II., Oliver Cromwell, and the Commonwealth. We try to take the high points in history and master them thoroly. When the pupils know these well they are able to fill in what other information may be necessary.

Professor W. F. Gordy, of Hartford, Conn.—The object of the study of history is unity and continuity. The main effort should be to have historical information illuminate the life of the student. Correlate biography and the life of the student. The main point for the pupil is: "Is it worth the while for me to know these historical facts?" Some knowledge is worth the while acquiring and some is not. Know a few things, so that the pupil can make these few a part of himself. We teach too many periods and too much in each period. The object of the study of history is to know one's relations to his surroundings. Never forget that the boy is going to be a social being, and that we fit him for society thru the study of history.

SUPERINTENDENT A. S. KINGSFORD, of Litchfield, Minn.—Logical sequence ought to be the main thing in the study of history. Make English history the basis of information. The reason is that history is an evolution. Then take history of Greece and Rome, and in those three histories we have the essential elements of all history. They represent democracy, republic, and empire. We ought to study creative periods, instead of retrogressive, and that is the reason why we should emphasize the study of the democracy of Greece and the republic of Rome. After that we could take up mediæval history, if we have time. Only a limited time can, under ordinary circumstances, be given to history. Other subjects demand attention. Citizenship is, of course, the main object, and we teach that thru history; but other subjects must also have due attention.

ENGLISH CONFERENCE

LEADER, THOMAS C. TRUEBLOOD, PROFFESSOR OF ORATORY, UNIVERSITY OF MICHIGAN

[REPORTED BY PROFESSOR GEORGE W. SAUNDERSON, SEATTLE, WASH.]

In the English section the discussion was directed toward the spoken English, and the subject was divided into three parts: (1) Pronunciation, its purity, and the effort to establish reasonable uniformity in America. (2) Training of the speaking voice; the underlying principles of emphasis and expression; expressive reading as an aid to the teaching of literature. (3) Rhetorical work, the declamation, the oration, the debate; contests.

As to the first of these divisions, Mr. Trueblood urged that a universal English pronunciation be sought; that localisms and provincialisms be rooted out as far as possible; that the teachers of the high school be carefully drilled in a common-sense, economic, authorized pronunciation; and that every teacher, whether in English, Latin, or mathematics, should note and correct mispronunciations in the class-room. In this way there would be less for the colleges and universities to correct.

Some of the agencies suggested as means of polish in pronunciation were the association of peoples of the various sections in commercial relations; intermingling in great cities; meeting in conventions and conferences; travel and observation; observing and following the pronunciation of speakers of culture and refinement; receiving direct instruction from those well prepared to teach spoken English.

Mr. Trueblood called attention to a few special provincialisms, among which were the following: *a*, *arm*, *far*, is often pronounced as *a*, *call*, *law*, and vice versa; *ou*, *sought*, *nought*, becomes *o*, *sot*, *not*. There is a tendency to make all short *o's* alike, e. g., the *o* of *sot* and *song* is not the same; *u*, *tune*, *duty* is wrongly pronounced as long *oo*. There is a tendency to slight the *r* in the South and parts of the East, and to exaggerate it in parts of the North and West. A modified and softened sound is preferable to either.

MISS VIOLET JAYNE, associate professor of English in the University of Illinois, said she would be sorry to lose the edge of some provincialisms that she was fond of hearing. She deplored the overexactness of some in their pronunciation, which called attention away from the thought to their manner. She was much interested in spoken English from the standpoint of literary interpretation.

DR. E. E. WHITE, of Columbus, O., spoke of the importance of not overaccenting unaccented syllables, and used as an illustration the word *trespass*, the last syllable of which is often given too positive a sound of short *a*. He urged the cultivation of the voice, because the uncultivated voice cannot express the finer distinctions of sound. But let your voice be your servant, not your master. It is a form of pedantry to display pronunciation.

PRINCIPAL OLIVER S. WESCOTT, of Chicago, advocated accuracy even to the point of overexactness, that the pupil may leave his slovenly mumbling far behind.

Mr. Trueblood then took up the second of the topics set apart for discussion, "The Training of the Speaking Voice for Expressive Reading." Before vigorous training for the speaking voice should begin the average student should be advanced to at least the third year of the high school, for then the voice will have become reasonably well settled. But expressive reading should begin as soon as the child gets over the act of naming words. Question him as to the meaning, and he will often give it in the words of the book, and with far more expression than when reading. This gives the qualities of directness and naturalness so much to be desired. Then as the child advances give him hints as to sense emphasis. Show that emphatic words are those necessary to the thought — the key words; such, for example, as you could least afford to cut out of a telegraphic message.

In the last two years of high school attention should be paid to the simple principles of vocal expression — pitch, force, time, and quality in utterance. There should be frequent reading from the English classics, not for grammatical construction, etymology, or philology, but to catch the spirit of the author. English literature should not be slighted vocally. Teachers should be able to interpret, not that students should imitate, but that they should be led by suggestive hints of expression to gather the full force and effect of the lines.

It was suggested that a good way to teach Shakespeare after critically studying the lines is to assign characters in the principal scenes of the play under consideration to members of the class, and require them to commit and present the scenes in the class-room with such force and effect as is consistent with propriety.

DR. A. F. NIGHTINGALE, of Chicago, urged very strenuously that teachers train the speaking voice, and bewailed the fact that so few are really expressive readers. "I have examined hundreds of teachers for the Chicago schools and found hardly one I would wish to put before children to teach reading."

C. S. HARTWELL, of Brooklyn, N. Y., spoke of the very great natural expressiveness of the language of Milton, Shakespeare, Scott, and Tennyson. Their language is attractive, because it fits their ideas. It takes a better teacher to teach English than a foreign language, because students having a knowledge of the practical use of English are more critical than with teachers of other languages.

PROFESSOR GEORGE W. SAUNDERSON, of Seattle, Wash., spoke of the value of oral reading as a means of intellectual and literary training, of the analysis of the sentence, the paragraph, and the whole composition, and then of vocal synthesis as a means of mentally and spiritually transporting the ideas and feelings to others.

MR. WEST, of Wisconsin, made the point that in grade teaching if selections different from those found in the text be given to pupils to read in the class they give better expression to the thought, because the matter is new to the audience. They gain directness by trying to entertain and instruct.

Mr. Trueblood then directed the discussion to the third of the topics for discussion, "Rhetorical Work." He commended original work in writing and speaking in the last two years of the high school. Some simple hints on planning and constructing speeches should be given by the teacher, corrections should be made, and then the papers should be rewritten, so that full benefit may be derived from the criticisms. Opportunities for more formal orations are offered in the oratorical contests which lead to district and state contests, such as many of the states have already organized.

As interscholastic debates are also occupying a prominent place, it was suggested that a few hints on argumentation and parliamentary usage might contribute much toward properly utilizing the competitive spirit of debate. Questions of live interest should be proposed under faculty direction, and so worded as to give opportunity for good argument on both sides of the question. These questions, because of their vital interest to students, make it much easier for them to express themselves with force and effect.

Mr. West and Mr. Hartwell spoke of the great value of these debates. The latter suggested three grades of oratorical work in the schools: (1) the declamation, valuable as a means of crystalizing one's manner; (2) the oration as a means of crystalizing one's thought; and (3) the debate, useful as a means of putting thought into action — a practical form of public speaking, developing ability to cope with emergencies.

General discussion followed as to methods of arousing general interest in debate, methods of preparation, schemes for securing satisfactory decisions, points on which decisions should be made, the conduct of debates, and other points of vital interest to teachers of English and oratory.

PRINCIPALS' CONFERENCE

LEADER, W. J. S. BRYAN, PRINCIPAL OF HIGH SCHOOL, ST. LOUIS, MO.

[REPORTED BY FOREST C. ENSIGN, PRINCIPAL OF HIGH SCHOOL, COUNCIL BLUFFS, IA.]

THE LEADER: In the selection of topics for consideration at this conference, I have been guided by the desire to have the discussions fruitful of results in that they may call forth an expression of opinion about matters of real concern to those who are engaged in the management of secondary schools.

I have named, and very imperfectly outlined, several topics, not with the idea that all could be considered, but that those may be discussed in which there is the greatest interest.

Having noted the very general interest manifested in the first topic sketched, "School Athletics," I shall occupy a few moments in its elaboration before opening the meeting to such discussion as may be pleasing to those in attendance.

At a meeting of the North Central Association of Colleges and Secondary Schools, the subject of school athletics called forth a most animated discussion, which resulted in the appointment of a committee to consider the whole subject and to report at the next meeting the result of its deliberations. This action, taken last March in Cleveland, certainly warrants the conclusion that the subject is of pressing importance and may well engage our thoughts at least a portion of the time set apart for this conference.

It is a question of practical importance, because it has not been called up from the realm of the imagination, but has arisen in the life of nearly every secondary school. It is a practical question, because athletic sports are natural to the adolescent period of life. The exuberance of vitality finds in them a healthy field for its pleasurable exercise. Having had their earliest development in the colleges of the country, it may be because in them young men lived together and were thrown upon their own resources for social pleasure, and so naturally gave some time to physical exercise, or because gymnasia were provided by the colleges for the physical well-being of students, athletics of late years have permeated the secondary schools, in many of which physical culture is now receiving the systematic attention it surely deserves, which is rendered possible by the wise provision of properly equipped gymnasia.

The existence of athletics and their forceful if not forcible entrance into the life of secondary schools has been regretted by some, because they seemed likely to disturb the calm serenity of the school, and often did prove a disquieting influence. It has taken the world, or at least some portions of it, long years to learn that the natural tendency of children and youth, and indeed of mature men and women, to indulge in sport and amusement is not sinful or subversive of good, when properly restricted and wisely directed by reason, but is a means of refreshing, conservative of energy and preservative of life itself.

Because athletics were viewed with distrust and disfavor, they were for some time left severely alone, if they were not openly discountenanced and discouraged. Left to themselves, the youth displayed a lack of judgment which older heads and mature years might have contributed had there been proper sympathy with youth and a right appreciation of the opportunity afforded for helpful suggestion and wise direction.

Unfortunately those who give themselves wholly to athletics are often — possibly as a necessary result of such perversion — neither intellectual nor moral. It is therefore not strange or inexplicable that, left to themselves and the example of such persons, the youth should run to excess and turn to evil that which by nature was capable of the best uses. Athletics unregulated have been harmful; regulated, they may be made to exert a wholesome disciplinary influence. Men ought to have learned the lesson of the age — that forces which are destructive when not understood or not brought under control may become the most efficient servants of him who has learned how to take advantage of the laws of their being. Teachers, of all men, need to know this fact and profit by its teaching in dealing with the souls they are to guide and make efficient in righteousness.

If time permitted, I should dwell at some length upon the potential influence of athletics as a means of education; but it must suffice to briefly state the effects that may be and have been produced by their proper use.

Both in individual events and team playing, the powers of observation are called into the keenest activity, as upon the accurate noting of conditions and circumstances success or failure depends. The alertness, the quick perception, and prompt action of a pupil on the athletic field are often in strong contrast to the dreamy indifference of the same pupil in the recitation room. No movement escapes the notice, no irregularity goes unchallenged.

In the daily practice and on the field of contest, during all the period of training, what self-control and restraint of desires is observable!

In the hour of trial no hardship, no physical discomfort or pain, is regarded as of moment if thru it the touchdown may be scored, or the home plate crossed, or the hurdle cleared, or the goal reached. The players smile at exhaustion, make light of pain, bravely dare anything, cheerfully do anything that seems to promise victory.

One of the most striking effects of athletics is the prompt and unquestioning recognition of authority as vested in coach or captain, which results in absolute and immediate obedience to the one temporarily clothed with the right to command. The yielding of implicit obedience in such cases, based upon the perception that in this way alone victory is possible, may become a revelation of duty to those who have been slow to recognize their obligations to home and school. At least it is a very effective analogy for the teacher to draw, and discloses the falseness of the position of the pupil who fails to yield a like cheerful obedience to school authority.

In the management of field-day, or football contest, or baseball game, in the conduct of the affairs of the athletic association, pupils learn many a practical lesson in organization. I recall a complete transformation that was made in an athletic pupil by his induction into office. Careless, noisy, disorderly he had been before he was raised to the dignity of president of the athletic association, but on taking the chair there was apparently a complete change in his conception of the value of order and regulation, and from that time an appeal along lines of the necessity and value of organization never failed of a ready response. In more than one instance just appreciation of organization has been developed by participation in athletic affairs.

But a more obvious effect is the creation of school spirit, or a sense of loyalty to the institution whose colors are defended on the gridiron or the diamond, on the track or the rowing course. Even those who merely shout for the school on the bleachers have kindled within them a sense of loyalty which may be used in other connections as well, if the teachers of the school sympathize with athletic sports and do not withhold their presence and approval and by sentiments of disfavor make the natural expression of loyalty appear to be an act of hostility to good order and of disrespect to regulation. I do not mean that the thoughtlessness and impulsiveness and intensity of youth may not overstep he line of propriety. Excessive jubilation and noisy demonstration in the hour of victory are hard to prevent or repress. Indiscretion is not treason, and ebullition of spirit is not rebellion; but the wise teacher will be quick to note the danger and carefully plan to utilize the tremendous force displayed, directing the flow of the current while confining it to a definite channel lest it should sweep over the banks in a destructive flood.

There is conservation of energy in spiritual forces as well as in natural forces. The conditions of the transformation of the energy of adolescence from one form to another are the secret of the secondary teacher's power. Co-operation on the part of pupils is to be wooed and won by thoughtful attention and considerate, loving service on the teacher's part. He who cannot enter into the innocent, natural pleasures of youth has no rightful place in the schoolroom. Sympathy, to be effective, must be genuine and spontaneous. Athletics afford the teacher an opportunity to co-operate with pupils by sympathy and helpful suggestion, and by actual presence and service in a way that will bring return of co-operation on the part of the pupil in the serious work of the schoolroom.

The dreaded deleterious effect of athletics upon scholarship may be prevented by foresight and wise regulation. It is due to an injudicious distribution of energy on the part of pupils and want of system in the use of time. Scholarship qualifications carefully enforced should be made the prime conditions of participation in athletic events of all kinds. Such qualifications the pupils themselves will be ready to adopt if they are suggested before the opportunity to comply with them is past. Retroactive measures do not meet the approval of young or old. Without such qualifications scholarship will suffer; with them, the love of athletics will be an effective motive to effort on the part of otherwise indifferent pupils — not always a sufficient motive, it is true, but in many cases enough to produce satisfactory scholarship in those who would otherwise have been deficient. If there were no athletics there would be indifferent pupils, lacking in force and determination. Wise regulations with reference to athletics may make them a means of stimulation and prevent them from being an excuse for neglect. I may be pardoned if I cite from my own school instances in proof of the proposition that athletics are not of necessity injurious to scholarship. Three years ago there went from the St. Louis high school to Williams College a young man who had taken the prize as the best all-round athlete. . . . . This young man has continued his interest in athletics, was made class president, and has taken the same high grade in scholarship that he maintained from the first in the high school. Two years ago there went to Princeton a member of the football team, who will complete his course with honor next year, and has sustained himself in college entirely by his own efforts, without a dollar of expense to his mother. Last year there entered Harvard a young man who, I am informed by the secretary, has taken excellent rank in his class, and has been the only freshman in many years to make the 'varsity baseball team.

It is natural and desirable that there should be displays of the various manifestations of vigor and skill, but all such contests, whether between pupils of the same school or interscholastic, should not be unregulated contests of strength, subject to the temptation to unfairness, which, like lying, is the refuge of weakness. They should be manifestations of strength and agility and courage and judgment resulting from deliberate training and persistent practice. The desire to achieve the best results by training and temperance in all things should be encouraged, but should be subordinated to the readiness to recognize in others like or superior excellence, in scorn of deception or guile. To cultivate this spirit there is no more effectual way than to bring about the voluntary adoption of carefully formulated rules for the purpose of securing such inspection and control of all contests as will reduce to a minimum the possibility of unfairness, the deadly foe of manly competition. The time to fortify against temptation is when free from the stress and strain of trial. It is possible for individuals and schools to so foster and cultivate a love of honor that contestants will scorn to stoop to indirection, and will generously and sincerely applaud the evidence of the possession of desired power by another. Few would advocate or approve anything else than fair play when they were not under the pressure of strong excitement, warping their judgment as the lens is made to distort an image when subjected to pressure. The idea must be fixed in the minds of pupils that defeat is not disgrace, tho victory be glorious, and that no honor lies in success unless achieved by merit and as the result of courage and determined effort. In the individual school it is not difficult to secure a right spirit of generous rivalry. When more than one school is involved, concerted action is required, and the conscious cultivation of the true sportsman's spirit. In school organizations and interscholastic leagues, faculty, pupils, and alumni should act in conjunction, if the best results are to be secured. The desire of the school authorities must be to contribute maturity of judgment and knowledge of affairs, which pupils may not possess on account of inexperience. Pupils will not be found intractable, and where sympathy is evident will be glad to accept suggestion. They must be made to feel that, while the management of athletics is laid largely upon them, the very existence of school organizations is dependent upon the favor and approval of the principal, who is responsible for the successful conduct of the whole, and deeply interested in the vigor and growth of every part.

In my own school, so important have I deemed the conduct of athletics that I have given it in charge of the assistant principal, who devotes to it whatever time and attention may be required. While we have not accomplished all that we desire, so much has been done that I may confidently affirm that with forethought and attention athletics may be made to yield abundantly, and physical, mental, and moral development result.

DISCUSSION

The discussion which followed was full of life and interest, and was carried on freely for an hour and a half, both ladies and gentlemen participating.

It was the general opinion of those present, who represented more than twenty states and territories, that the real boy and girl can be reached most effectively thru properly regulated athletics.

Many helpful suggestions were made by men from various localities. The Iowa plan of regulating school athletics was explained, and also the plans of Illinois, Wisconsin, Minnesota, and St. Louis, Mo.

The possible usefulness of a federation of state organizations in this connection as well as others was suggested.

The salutary influence of well-regulated school athletics upon college athletics and upon those likely to engage in them was clearly shown.

The theme of the paper proved so fruitful of discussion that there was not time to consider the other questions selected by those present.

MATHEMATICAL CONFERENCE

LEADER — CHARLES W. NEWHALL, SHATTUCK SCHOOL, FARIBAULT, MINN.

TOPIC: CORRELATION OF MATHEMATICAL STUDIES IN SECONDARY SCHOOLS

THE LEADER: Mathematical instruction in our educational system is divided into the three large classes: elementary instruction, secondary instruction, and higher instruction.

In attempting to secure correlation of the various branches of mathematics into one homogeneous whole, we should first seek to find this unity extending thru all these divisions of educational activity. By a careful adjustment of the work of these three divisions much of the waste in mathematical instruction may be avoided.

If the secondary schools and the grade schools can agree that certain parts of arithmetic be omitted from the courses of the grade schools, and elementary algebra and geometry be introduced in their places, we will find that the pressure in the secondary schools will be much relieved and the student will enter the high school much better equipped for his work. Then if, on the other hand, the schools and the colleges can agree as to just what part of the work in mathematics shall be done before entering college, our first great work of harmony and unity is effected.

Fortunately this bids fair to be soon accomplished. The Committee of Ten of this Association, and more recently the Committee on College Entrance Requirements, have made specific recommendations looking to exactly this end. The Committee on College Entrance Requirements has made a long step forward in defining the units of work and the character of the instruction that shall be required in mathematics as a preparation for college. The Examining Board of the Middle States and Maryland has tended to crystallize sentiment in the matter by the prompt adoption of their recommendations.

Whether or not all colleges accept the plan of this board, and whether the entrance to college may better be by certificate than by examination, the fact still remains that the work of this committee has practically made definite and uniform the amount of mathematical training a candidate for college must acquire. So we may consider that the waste and friction at the point of division between the secondary and higher schools are in a way to be satisfactorily eliminated.

On the other hand, educators are equally unanimous as to the best way of securing harmony between the work in mathematics in the grades and in the secondary schools. We all agree, I am sure, as an academic proposition, that geometry and algebra in elementary form should be begun in the grade schools. When the fortunate time comes when we shall have six years in our high-school course, we can then arrange these matters to suit ourselves; but at the present time we are presuming to have the same right to require from the grade schools certain preparation for our work that the colleges exact from us in preparation for their work.

I believe the grade-school teacher and the superintendent feel the necessity and the advantage of these mathematical studies in the grades as much as the secondary teacher does, and the reason the idea has not been more generally adopted is on account of the practical difficulties involved. In the Chicago public schools the experiment of teaching algebra in the grade schools was tried and abandoned, partly, I believe, on account of the inexperience of the grade teachers. In other places it has been found impossible to introduce any new studies into the already crowded curriculum of the grammar schools, or to require any new work of teachers already teaching too great a variety of subjects. In some places there exists a prejudice against displacing such a practical study as that of arithmetic to make room for the study of geometry and algebra. But these prejudices and practical difficulties have been overcome in many places, and the wisdom of introducing the study of elementary geometry and algebra in place of certain special subjects in arithmetic has been conclusively demonstrated. It will not be long before all schools will find it necessary to readjust their curricula so as to conform to these recommendations.

When this time does come, the teacher of mathematics will be fortunate beyond most of his fellows, except perhaps the teacher of English. He will then have a course in mathematics beginning in the kindergarten, extending thru the primary schools, the secondary school, and at least the first two years of college.

If the students from the kindergarten to the college are to be turned over to us a certain number of hours each week of every year for mathematical instruction, why can we not map out a broad and comprehensive scheme for the study of mathematics, which shall call for a gradual development and a constantly broadening view of the whole field of mathematics and which shall not be limited by such artificial boundaries as are at present set to the study of algebra, geometry, trigonometry, etc.?

In many schools algebra is studied, say, in the first year of the high school, then discontinued while plane geometry is taken up; this is completed, and then perhaps higher algebra is studied, or solid geometry, and, where the school offers it, the student continues with trigonometry and the use of the logarithm table. Is there any necessity for these artificial breaks? Is it best to *complete* one subject and then lay it aside on a shelf to rust while we take up another, even if we may find time later to take down the first to brighten it up a bit, to pass the inspection for college?

The Committee on College Entrance Requirements is very clear in recommending that the study of geometry and algebra should be carried on in the *same year*, perhaps geometry two days a week and algebra three, or geometry the first half-year and algebra the second, but at any rate the two studies in the same year. But can we not do better than this? Are not the subjects intimately enough related so that we can teach them *both* the *same day* and *every day?* We can thus carry the study of geometry and algebra along together thru several years, introducing also the simple ideas of trigonometry early and developing that subject alongside of the others. We may even introduce a few elementary ideas from the analytic geometry at places where they will elucidate other matters.

Such an arrangement of subjects would call for no more time than we at present devote to them all separately. We could teach the same matter in four years, or six, but the arrangement would be different; in fact, there would be a great saving of time and of effort in conquering a difficulty once instead of two or three times in slightly different aspects as it presents itself in the different studies.

We could make the study of a geometric figure throw light on the solution of an algebraic equation, we will say, or, conversely, we could use the tools of algebra to help us out of some geometrical difficulty. Some of us do that now. Yes, but the scheme is capable of a much wider development. It has been found successful in Germany. There the various lines of mathematical study are carried along side by side and interwoven into one. Each subject is studied thru several years with constant reference to its bearing upon and connection with each of the others. The result attained by their system seems to be better than the result attained by ours, and it is accomplished in a shorter time.

This correlation of the mathematical studies begins very easily in the elementary schools. In the kindergarten the child begins to acquire his ideas of number and of form at the same time. Thru the elementary school a skillful teacher can combine the study of drawing, arithmetic, and mensuration so as to leave a well-rounded and definite impression in the child's mind as a result of this training. The equation can be introduced very early. If the problem to be solved by the use of the equation is a numerical problem the introduction of x will cause no difficulty. The child will soon see that the x is merely an abbreviated form of writing "the tail of the fish," or whatever may be the subject of the problem.

After algebra has been begun arithmetic should not be discontinued. The study of the operations with fractions in algebra can be illustrated by similar operations with arithmetical fractions. An algebraic problem can be verified and made concrete by substituting numerical values. Or the general nature of an algebraic formula may be shown, by applying it to a great many special arithmetical cases. Or we may study the answers to a general problem in which the known numbers are represented by letters, and discover how each one of them enters into the result. Then we may solve the same problem where the given quantities are numbers and find that the various known elements of the problem are all merged into one number and lose their identity. By the use of a little skill, the teacher can show that a literal problem is much more interesting and instructive than a special numerical case of the same problem, inasmuch as we are able to trace every given quantity thru the work of the solution and find how it affects the result.

Students are not slow to see that algebra is merely a generalized arithmetic; that the operations are the same, and that the forms of the results are different only because in algebraic solutions we can often only indicate our operations, and cannot actually perform them so as to merge several quantities into one, as with arithmetical numbers.

I am sure every teacher of geometry has felt hampered at times because the student does not understand a simple algebraic manipulation that becomes necessary in connection with some geometrical proof. He may have forgotten the algebraic principles involved, or he may not feel quite sure of his ground in applying his algebra to such an unfamiliar problem. If the study of algebra and geometry were carried on together, neither of these difficulties would occur. Many problems in computation in geometry are quite easily worked out by the use of equations, or certain proofs involve a little algebraic manipulation. The student should feel perfectly sure of his algebra, so that the geometrical truth should not be obscured by any haziness about the algebra involved.

Geometry and algebra are entirely different, of course, in their subject-matter. The one deals with number as expressed by various symbols and the other deals with form. *But they touch at many points.*

For example: Take the formula $(a+b)^2 = a^2 + 2ab + b^2$ and interpret it geometrically into "The square of the sum of two lines is equivalent to the sum of their squares plus twice their rectangle." Similarly we can show geometrically the truth of the algebraic formula $(a-b)^2 = a^2 - 2ab + b^2$ and $(a-b)\ (a+b) = a^2 - b^2$. If the same results are arrived at in two ways, by an algebraic and a geometric consideration, how much light one method will throw upon the other!

Again, would it not be a good plan to introduce the notion of a graph in connection, with the solution of quadratic equations?

If the student can see that the straight line cuts the parabola in two places, and then learns that these two places give the values of x and y found by solving the equations of the two curves considered as a pair of simultaneous equations, I am sure he will have a clearer idea of the fact that altho either of our given equations, alone, may be satisfied by an infinite number of values for x and y, there are only two pairs of values for x and y that will satisfy both equations at the same time. The meaning of simultaneous equations becomes apparent. And again, I am sure he will readily see by a study of graphs that a system of two equations, one of the second degree and one of the first degree, will give two values for x and two for y, while a pair of quadratic equations will in general give rise to four values for each. And if he plots various curves at the same time that he is solving for the roots of their equations it cannot help but be instructive to examine the cases where a given equation has negative roots, equal roots, or imaginary roots. To illustrate these algebraic facts by the use of graphs would require only very elementary ideas of analytical geometry.

When we are considering similar triangles and proportional lines, why can we not learn the names of the trigonometric functions? The pupil learns that in all similar right triangles the ratio of one leg to the hypotenuse is always the same. Why not define this ratio at once as the sine of the angle A, and similarly define the other trigonometric functions? There can be no better place to introduce these ideas. And again, when the student is learning, as in Book III of most of the geometries, the relations that exist between certain lines of certain triangles, why not initiate him at once into the relations which exist between the sides and angles of *any* triangle? A bright student will almost always raise the question whether the sides of a triangle are not connected by some relation with the angles of the triangle. The introduction of these fundamental notions would not call for much trigonometry at this point.

Why not follow up the chapter on exponents in algebra by a study of the simpler properties of logarithms? A logarithm is but an exponent, and the mystery and difficulty surrounding the operations with logarithms would disappear if the student could be made to see this fact clearly and to recognize that the familiar laws for exponents govern the work with logarithms. The student will grasp eagerly the notion of the practical value of a logarithm table. A few calculations with logarithms would give practice in arithmetic and an excellent review of decimals, and perhaps accustom the student to the use of a table of logarithms in *other subjects* besides that of *trigonometry*. As taught at present, there is almost always in the student's mind a confused idea that logarithms have some intimate relation with trigonometry. They are never quite sure of the difference between the tables of natural functions and the tables of logarithmic functions.

I have suggested but a few places in which the studies of arithmetic, algebra, geometry, and trigonometry may be brought together. Any teacher can think of many other ways in which the various subjects can be made to help one another.

I have said nothing about an attempt to correlate the sciences with the mathematical studies. The study of physics and mathematics, for example, are so inter-related and interdependent that it is hardly possible to separate them. Geometrical and arithmetical progressions are illustrated from physics. Physics contributes many interesting problems to geometry and algebra, and geometry and algebra are often called in to help develop the laws of physics.

Of course a broad application of the principle of correlation would call for a correlation of physics, astronomy, and other of the sciences with mathematical studies, which broad acceptance of the term would be an excellent thing, and in every way to be encouraged. It would be well, for example, if mathematics and physics could be taught by the same teacher, so he could elaborate a complete correlation between them.

I have not attempted to consider here the broader view of the correlation of mathematical studies with other subjects, but rather the more definite and limited question of the correlation of the various branches of mathematical study with one another. The possibility of merging the subjects of arithmetic, algebra, geometry, and trigonometry into the one broad subject of *mathematics*, and teaching it as such thru all the years of the elementary and secondary schools, is the question I want to propose for your consideration and discussion.

Of course the attempt to follow out this plan in its full and ideal extent would involve the working out of a new system of instruction, a new allotment of subjects to the various years, new text-books perhaps. If the plan is a wise one, a good teacher can meet these difficulties. If the idea is too visionary for a full materialization, may we not gain something by a partial application of the principle?

I am putting the question for your consideration, then, we will say, in two parts:

(1) Is the plan as suggested here, in its full and ideal development, a sound one, and (2) To what extent is it practical, at this time, to work it out?

DEPARTMENT OF HIGHER EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 9, 1902

The first session of the department was called to order in Room 11 of the University library building by President Cyrus Northrop of the University of Minnesota, at 2:30 P. M. on Wednesday, July 9. About 165 persons were present. In the absence of the president, vice-president, and secretary of the department (President W. H. P. Faunce, of Brown University, Providence, R. I.; President C. W. Dabney, University of Tennessee, Knoxville, Tenn.; Professor John W. Perrin, Western Reserve University, Cleveland, O., respectively), President Northrop nominated Dr. William W. Folwell, of the University of Minnesota, as acting president. Professor Folwell was duly elected and took the chair. Mr. F. P. Keppel, of Columbia University, was elected acting secretary.

Mendelssohn's "Lift Thine Eyes" and "Cradle Song" by *Brahms* were sung by the Lorelei Ladies' Trio.

Professor R. H. Thurston, of Cornell University, Ithaca, N. Y., was absent from the meeting, and his paper entitled "Education for Professional Life and Work" was therefore omitted.

Professor Edwin G. Dexter, University of Illinois, Champaign, Ill., read a paper entitled "Should Entrance to College Be thru Examination of the School or of the Pupil?"

George N. Carman, director of Lewis Institute, Chicago, presented the report of the Commission of Accredited Schools, of which he is secretary.

Upon the resumption of order, after the short recess which followed the reading of these papers, the chair, upon motion, appointed a committee of three to report at the next session for the nomination of officers for the ensuing year, as follows:

President William L. Prather of the University of Texas, Austin, Tex.
Director George N. Carman of the Lewis Institute, Chicago, Ill.
President William H. Black of Missouri Valley College, Marshall, Mo.

The chair then introduced Dr. H. M. Lane, of San Paulo, Brazil, who gave an extemporaneous account of his many years' experience in the organization of Brazilian education.

A general discussion of Professor Dexter's and Director Carman's papers, and upon the general question of the articulation between the secondary schools and the colleges, followed, in which the following gentlemen took part: Director Carman (in reference to Professor Dexter's paper); Professor John C. Hutchinson of the University of Minnesota; Principal E. V. Robinson of St. Paul, Minn.; Mr. F. P. Keppel, of Columbia University, New York city; Professor G. W. Knight of the Ohio State University, Columbus, O.; President Cyrus Northrop of the University of Minnesota; Professor Snyder of the University of Michigan; Professor Dexter (in reference to Director Carman's paper); Principal L. H. Ford, of Webster City, Ia.; Professor Folwell, the acting president of the department; Charles Alden Smith, principal of the high school, Duluth, Minn.; Professor Hale, of Michigan; Inspector John F. Brown of the State University of Iowa; and Professor Thomas Nicholson of Cornell College, Iowa.

Upon motion, the session adjourned at 5 P. M., to meet at the same place on Friday, July 11, at 2:30 P. M.

SECOND SESSION.—FRIDAY, JULY 11

After the session had been given an opportunity, in another room, to hear the piece of music on the program, "The Holy City," *Adams*, sung by Master Henry Pauly, the meeting was called to order at 3 P. M. by Acting-President Folwell. About 110 persons were present.

Professor J. Irving Manatt, of Brown University, Providence, R. I., presented the first paper of the session, "The Future of Greek in American Schools."

This was followed by the second paper, "Education in the Appreciation of Art," by Chancellor William Bayard Craig of Drake University, Des Moines, Ia.

Under the head of "Miscellaneous Business," President Prather presented the following report for the Committee on Nominations, which was accepted and adopted by the Department, and the nominees declared duly elected:

MINNEAPOLIS, JULY 11.

Your Committee on Nominations of Officers for the Department of Higher Education nominate the following named gentlemen:

For *President*—Benjamin Ide Wheeler, of California.
For *Vice-President*—William H. Smiley, of Colorado.
For *Secretary*—John H. McCracken, of Missouri.

Respectfully submitted,
WILLIAM L. PRATHER, *Chairman*,
GEORGE N. CARMAN,
WILLIAM H. BLACK,
Committee.

With reference to the communication from the secretary of the National Educational Association regarding the appointment of a committee to confer with a committee of the Society for the Promotion of Engineering Education, President William L. Prather offered the following resolution, which was adopted by the department:

Resolved, That a committee be appointed by the Department of Higher Education with authority from the Board of Directors to participate in the conference with the committee from the Society for the Promotion of Engineering Education in the formulation of entrance requirements in mathematics, chemistry, physics, and drawing, and that the committee be as follows:

President Henry S. Pritchett, Massachusetts Institute of Technology, *Chairman*.
Professor William Hallock, of Columbia University.
President Winfield S. Stone of Purdue University.
Professor H. E. Eddy, of the University of Minnesota.
Principal E. V. Robinson of the Central High School, St. Paul, Minn.

There was no discussion upon the papers presented.

Professor Folwell, the acting president, expressed, on behalf of the University of Minnesota, the pleasure which the university had felt in having the department as its guests in 1902. The meeting then adjourned at 4:45 P. M.

F. P. KEPPEL,
Acting Secretary.

PAPERS AND DISCUSSIONS

SHOULD ENTRANCE TO COLLEGE BE THRU THE EXAMINAITON OF THE SCHOOL OR OF THE PUPIL?

EDWIN GRANT DEXTER, PROFESSOR OF EDUCATION, THE UNIVERSITY OF ILLINOIS

Biologists tell us that specialization in the animal kingdom is brought about only thru variation; that an organism is what its great great grandfather was — no better and no more — until it begins to show divergencies from the ancestral type. What is true of the organic evolution of the animal world is equally so in the institutional development of the world educational. The American school system is as much the result of the survival of the fittest among a multiplicity of variations as is anything which nature presents, and its advancement to a more perfect stage is as fully dependent upon the tendency to vary. That we are living in an era of tremendous educational mutability is a fact, and a fact, moreover, upon which future generations will have reason to congratulate themselves, even if we have not. Today's uncertainty makes tomorrow's certainty, and no small bequest to our children's children will be the solution of some of the crying educational problems of today.

Sports in the educational organism have made their appearance from the kindergarten to the university. Wherever increasing complexity has demanded more exact adjustment of parts, we find them. The problems of individual instruction; of semi-annual promotions; of electives; of the six-year high-school course; of the whole swarm of so-called "fads;" of entrance to college by other means than that of the examination of the pupil—these and many other somewhat radical departures from the ancestral type must be included within the category. In discussing any one of these variations we must at the outset free our minds of any *a priori* conclusions as to the universal goodness or badness of educational sports — as such. It is true that not all revolution is evolution, and that newness and goodness are not synonymous terms. It is, however, equally true that oldness and goodness are fully as far from being equivalent, and that if what has been is best simply because it is what has been, we have stagnation. The only valid criterion which we can have for judging the fitness either of the type or its variation for survival is the exactness with which it fulfils the demands made upon it by present conditions.

In the problem before us at this time for discussion, the type form is the entrance to college by means of the personal examination of the applicant for admission by officers delegated by the college, this examination to be the sole means of determining the fitness of the applicant for college work.

The variation is the entrance to college by candidates without subjection to such an examination, and solely because they have successfully completed a course of study in some secondary school, which *school* has been examined by an officer delegated by the college, and its course of study approved. I would here call attention to the fact that our subject is not that of the relative merits of the entrance examination and the certificate plan, which has been so fully discussed before the Eastern Association of Colleges and Preparatory Schools, since with them the examination of the school does not figure. I quote from President Eliot's remarks before the conference held in Boston in October, 1900:

> In the first place, in New England we have no system of really examining the condition of the secondary schools; therefore the experiment of certificate is tried under the most disadvantageous possible circumstances. When it was first introduced into this

country an argument was made in favor of it from the German practice, secondary schools in Germany giving an outgoing certificate valid at the university. A fatal defect in the argument was that the German secondary schools are supervised by competent government educational authorities — ours by none. In New England we have nothing more than an occasional friendly visit to some schools by some college officer. That is an extremely weak and imperfect method, though perhaps better than nothing.

Do not, then, confuse our problem with that of examination *versus* certificate as its solution has been attempted in New England, since we include another factor of no small pedagogical and administrative importance, namely, this very examination of the school the absence of which, there, President Eliot so much deplores.

The question of the superiority of either one of the two plans for the best co-ordination of secondary with college work must be settled by the criterion of pedagogical fitness. Institutions of learning are for the youth, and not the youth for the institution of learning, in spite of what may seem to be evidences to the contrary in the minds of some. We may, however, for purposes of analysis perhaps be justified in assuming that two criteria are subsumed by that given above, viz., the pedagogical criterion and the administrative criterion. Theoretically, the former should always be supreme, yet not infrequently the exigencies of our educational conditions are such that, temporarily at least, in the process of feeling one's way it must be made subservient to the latter. Let us then apply to the two methods of entrance to college covered by our subject each of these criteria in turn, and see what the effect of each is upon the pupil, the secondary school, and the college. This comparison can perhaps best be brought out by means of the direct question.

1. What is the pedagogical effect of the college entrance examination, as at present administered, upon the pupil? Let me at this point ask you to distinguish carefully between this—i. e., the entrance examination—and the examination as an occasional test of power and proficiency in regular school work. Whatever may be my own opinion with regard to the former, I am in hearty accord with much that President Hadley has recently written on the question of the latter. The two are, however, radically different in these two respects: First, the college examination is set by those who know nothing of the personal peculiarities of the applicant and can make no legitimate allowance for such peculiarities, while the other is not; and, second, in it the student knows that previous school successes, except as they are indicated by the present test, count for nothing. Both of these peculiarities make the college entrance examination open to criticism from the standpoint of our present criterion. My objection on the ground of the first is that the ordinary college entrance examination presents conditions to the youth the like of which he will seldom or never meet in after life, and to which we have no right to subject him. The aim of our education is the adaptation of the individual to an environment in which he is likely to find himself, and I would confidently

assert that not one person in one hundred will in his whole after life find himself in a situation the outcome of which he can predict with so little certainty as the one in which he faces his examiner. Pedagogically this is wrong. The youth is not stronger than the man, and no part of our educational machinery has a right to subject him to greater stress than he is likely to meet in subsequent years. I disagree as fully with those who hold that the entrance examination to college is valuable because it enables him to rise to similar emergencies which he is likely to meet in after life as I should with those who might urge the introduction into the public schools of a fire drill which included a jump from the fifth-story window into a net held on the sidewalk below. Proficiency in this feat might come in handy to one in a million; but what of the nervous strain on the others? On the second ground, that too much depends upon the entrance examination, I would base the argument that it is conducive to cramming. At whatever stage in the educational career it is understood by the pupil that promotion depends solely and entirely upon success in passing a given test, at that stage you will find that pernicious form of so-called study.

> As long as the student is practically told: no matter whether your previous work has been good or bad, no matter how you have prepared yourself for this examination, if you answer these questions you succeed, if you don't you fail,— the cram system with all its evils is destined to remain. (Edgar H. Nichols, *Educational Review*, May, 1900.)

President Butler, in an address before this Association not many years ago, said:

> It is bad psychology and bad education to suppose there is an obstacle at the pupil's sixteenth year which can be surmounted only by an examination. I am sure this should be done away with.

2. But to the next question: What is the effect of the entrance examination upon the secondary school? Here we shall find a more marked difference of opinion than upon that just discussed, or perhaps, if we may judge from the data presented by Principal Ramsay of Fall River, a much greater difficulty in having any opinion at all. Time prevents my making any considerable reference to his extensive report, which contains a tabulation of answers to twelve questions bearing upon the relative merits of the examination and certificate plans of college entrance, from twenty-nine head masters of secondary schools and the corps of college preparatory teachers in one public high school. Mr. Ramsay's conclusions are adverse to the certificate plan, altho it seems to me those conclusions are not supported by the data presented.

The answer to what may be considered his crucial question, "Do you on the whole think it wise to vest with the head master and his assistants the responsibility of determining the fitness of pupils to enter college?" was thirteen "yes" to thirteen "no," on the part of the masters, and four "yes" to three "no", by the instructors. That somebody's judgment, too, was bad is shown by the fact that a given question, viz., "How do your examination candidates compare with your certificate candidates in mental ability, physical health and strength?" when put to the preparatory schoolmaster, receives the answer, "Examinations better eight; certificates better one." To the chairman of the admission committees of seventeen colleges, "Examinations better one; certificates, five." Some one should be appointed to look after the physical and mental health of the examination candidate between the time he leaves school and enters college. Such a sudden decline is dangerous.

Aside, however, from the questions discussed in Mr. Ramsay's report comes that of the effect of the examinations upon the secondary school curriculum. So much has already been said and written upon this phase of the question that I need only mention it here. Few men of experience in preparatory work can deny that they have at times made sacrifice to the personal whims of an examiner who is mainly interested in and familiar with the more advanced stages of his subject. He feels that to do justice to the pupil who is looking forward to the *trial by questions* he must keep him primed on small technicalities, as well as forge him ahead in his subject, and his ideals are in danger of being upset; the integrity of course and curriculum of being shattered.

3. But for our third question. What is the effect of all this upon the college? The higher institution wants well-prepared students, and its principal interest is in getting them. What do the college men themselves think of the relative perfection of preparation of students under the two plans? Mr. Ramsay shows us that of the definite answers from the seventeen colleges, the certificates lead in matter of scholarship three to one, of general mental ability three to one, and in general performance of college duties five to one. In explanation of this to him unwelcome disclosure he says: "When a college admits on certificate, all but the very poorest pupils in the school from which certificates are accepted will accept these certificates." Hence he argues that the comparison is not valid. Is it not, however, also true that the most brilliant and best-prepared pupils from these schools, led on by the hope of entrance honors, prizes, and scholarship, will refuse the certificate, thus equalizing matters at least partially in this respect?

An attempt on my part to ascertain the relative class standing of the freshmen entering by the two plans at the large eastern colleges was not eminently successful, because of the labor involved by officers of those institutions in securing the data; but the following figures from perhaps the largest offering both plans are interesting and to the point.

STANDING OF FRESHMEN AT THE END OF THE FIRST TERM, FEBRUARY, 1902

	No. admitted	No. conditioned	Per cent. conditioned	No. unconditioned	Per cent. unconditioned	No. of conditions imposed	Average condition per student
By examination........	112	55	49.1	57	50.9	168	1.5
Without examination...	101	30	29.7	71	70.3	106	1.05

Another comparison which I was able to make between the percentage of failures in first-year subjects by the freshmen in one of the large Atlantic coast universities, which admitted only by examination, and those of five of the large state universities of the Middle West, where 80 per cent. of the students enter without examination, shows very plainly either that the criterion for grading is very different for the two regions, or that the western institutions get much better prepared pupils. The figures are as follows:

EAST		WEST	
Failed, Algebra	25 per cent.	Failed, Algebra	15 per cent.
Failed, Trigonometry	34 per cent.	Failed, Trigonometry	11 per cent.

These western institutions covered stand as high in the educational world as do the eastern; but since we cannot be sure of their criteria we cannot perhaps base upon the figures an argument in favor of the certificated freshmen. They are, however, very suggestive.

From the standpoint of administration the entrance examination is not open to very wide criticism, at least on the part of the higher institution. It is inexpensive, except to the pupil who has to make a journey to some examining center, and it works, on the whole, with very little friction; in fact on this score, and on this score only, does it show any points of advantage. It costs some money to examine the schools properly, tho, as will perhaps be shown by the next speaker on this program, the expense may be reduced to a minimum thru organization.

The sport, if I may return to my biological figure, of the examination of the school to determine the qualifications of the pupils for college entrance made its appearance at the University of Michigan in 1871. It has had its principal growth in the West. Till within a very few years, however, the examination was not strictly of schools, but of departments of schools, if I may make a distinction—and it is an important one to my mind—instructors from the colleges examining the teaching in their special subjects in the preparatory schools. Its latest modification is, however, the examination of the school as a whole by a special university officer whose sole duty it is to perform this function and to report to a committee of the college faculty which makes the final recommendations. It is precisely this form of examination of schools which I wish to contrast with the type form of the examination of the pupil.

In applying our pedagogical criterion, we find that such examination has not the slightest effect upon the pupil, and that it lacks all the unpedagogical features of the college entrance examination. The examiner never announces—or should not—the exact date of his visit, and the pupils need not know that he is present. From the pedagogical standpoint, too, the college is not the sufferer so long as the examiner does his duty and keeps up the standard, and we have already shown that the non-examined freshmen do not suffer in comparison with the examined.

It is in its effect upon the school that we find the principal arguments in favor of the plan ; first, because in doing away with the entrance examination it does away with its narrowing effect upon the curriculum, and, second, because it furnishes the school authorities, master and board, with an efficient and sympathetic advisor of the widest experience, whose salutary influence in the states within my observation can hardly be overestimated. The higher institution has other obligations to the lower than simply to set a mark for them and see them jump; it must act as trainer as well as marker, and in the inspecting officer we have these two functions combined. Questions of the course of study, of the program, of equipment, both as to buildings and laboratories, of teachers, and the many other problems which are puzzling the principal, who, under the atomistic conditions of our secondary school system, has heretofore had no one to consult, are helped to a solution by the broader experience of the high-school visitor. He is the concrete personification of the college influence—the present positive element which brings the influence into activity and effectiveness. Could it be shown, even, that the entrance examination to college is a real boon to the secondary school, it could, in my opinion, be sacrificed ten times over, in return for no other benefit than the invigorating stimulus which the college gives thru its official examiner. It is true that his influence would be greatest in parts of our country where, because of lack of previous development, secondary school growth is most rapid; but conditions have not yet reached such a stage anywhere as to make him a supernumerary, and I see no more hopeful thing in our educational development than this *sport* of high-school examination.

REPORT OF THE COMMISSION ON ACCREDITED SCHOOLS

GEORGE N. CARMAN, DIRECTOR OF LEWIS INSTITUTE, CHICAGO, ILL.

The North Central Association of Colleges and Secondary Schools was organized in 1895 for the purpose of establishing closer relations between the colleges and secondary schools of the north central states. At the sixth annual meeting held in Chicago last year, Dean Forbes, of the University of Illinois, read a paper in which he urged that the time had come when the association should attempt a practical solution of the problem of "so connecting a widely various and freely elective high school with a still more widely various and more liberally elective college that it shall be but a single unobstructed step from any part of the one to any part of the other." He proposed that we build with grateful confidence upon the foundation laid by the Committee on College Entrance Requirements of the National Educational Association in its report of 1899, by establishing a commission that should:

1. Define and describe courses of work in the various subjects of the high-school program which can be accepted by high school and college men alike as practically unvarying units of instruction, from which uniform current units the curriculum of the pupil, the graduation requirement of the high school, and the entrance requirement of the college may everywhere be made up.

2. Determine upon a certain number of constants, subjects which should be taught in every secondary school, and required for entrance to every college.

3. Make a list of high schools whose graduates are entitled to admission to college, and a list of colleges accepting and maintaining the uniform standard of entrance, and acting together on all related matters.

4. Make a list of high-school subjects, and the amount of work in each, for which the colleges will give advanced standing when offered in excess of the entrance requirement, together with a scale of values according to which such accepted high-school work may be translated into college credits.

As an outcome of the discussion of Dean Forbes' paper, the association established the Commission on Accredited Schools. It was made the duty of the commission:

1. To define and describe unit courses of study in the various subjects of the high-school program, taking for the point of departure the recommendations of the National Committee of Thirteen.

2. To serve as a standing committee on uniformity of admission requirements for the colleges and universities of the association.

3. To take steps to secure uniformity in the standards and methods and economy of labor and expense in the work of high-school inspection.

4. To prepare a list of high schools within the territory of the association which are entitled to the accredited relationship.

5. To formulate and report methods and standards for the assignment of college credit for good high-school work done in advance of the college entrance requirement.

The commission was duly organized in the course of the year, and its first report was adopted at the meeting of the association held in Cleveland in March of the present year.

The action taken as to unit courses of study in general is as follows:

1. A unit course of study is defined as a course covering a school year of not less than thirty-five weeks, with four or five periods of at least forty-five minutes each per week.

2. The graduation requirement of the high school and the entrance requirement of the college shall include fifteen units as above defined.

3. All high-school curricula and all requirements for college entrance shall include as constants three units of English and two units of mathematics.

The following is an outline of definitions of unit courses of study in particular subjects:

The three units in English are those recommended by the Conference on Uniform Entrance Requirements in English.

The four units in mathematics are: (1) elementary algebra, (2) plane geometry, (3) algebra and solid geometry, (4) algebra and trigonometry—as defined by the College Entrance Examination Board.

The four units in history are: (1) ancient history, (2) mediæval and modern European history, (3) English history, (4) American history, or American history and civil government—in accordance with the recommendations of the Committee of Seven of the American Historical Association.

In Latin the commission adopts the first two units as defined by the American Philological Association, and the third and fourth units as defined by the College Entrance Examination Board.

In Greek the definitions of the three units of the philological association are adopted.

The definitions of the four units in French and the four units in German are those recommended by the Committee of Twelve of the Modern Language Association.

In Spanish the commission adopts the definitions of the two units of the College Entrance Examination Board, which are in close harmony with the definitions of French and German of the Modern Language Association.

One unit each is defined in physical geography, botany, physics, chemistry, biology, and zoölogy. The definitions in the sciences are based on the recommendations of the committees of the Department of Science of the National Educational Association.

As to secondary school inspection it is enacted:

1. That the minimum scholastic attainment of all high-school teachers should be the equivalent of graduation from a college belonging to the North Central Association of Colleges and Secondary Schools, including special training in the subjects to be taught, altho such requirements should not be retroactive.

2. That in the opinion of the commission the number of daily periods of class-room instruction given by any one teacher should not exceed five, each to extend over a period of forty-five minutes.

3. That high schools should be adequately equipped with library and laboratory facilities.

4. That a board of inspectors should be appointed by the commission to ascertain the schools within the territory of the North Central Association which are entitled to accredited relationship under the above limitations.

5. That the commission cause to be printed and distributed to the several inspectors for the use of high schools and academies certain uni-

form blanks, with the intent to secure uniformity and to avoid duplication of work.

6. That it shall be the duty of the board of inspectors to submit to the commission the list of schools recommended by them not later than June 1 of each year.

7. That it shall be the duty of the commission to publish the list submitted to it by the board of inspectors not later than June 10 of each year, and to cause the same to be distributed to the members of the North Central Association.

The board of inspectors as now constituted consists of Inspectors Whitney of Michigan, Brown of Iowa, Aiton of Minnesota, Brooks of Illinois, and Hoge of Missouri.

As to college credit for certain work done in secondary schools:

1. The commission favors the general principle that colleges should give advanced credit for secondary school work, sufficient in amount and quality, done in addition to the fifteen units required for admission.

2. In the opinion of the commission no advanced college credit should be given for less than one full year of secondary school work in any subject, except so far as half units are specified in the definitions of unit courses, or for any study that is not pursued later than the second year of the high-school course.

3. The amount of advanced credit to be awarded in any subject should be determined by the college which the student enters.

In closing I quote from Professor H. P. Judson, chairman of the commission: "It is understood that the plans herein outlined will form a basis on which work may begin. It is not supposed that practical experience will justify every point in detail, but as fast as the commission learns that modifications are needed, they can readily be adopted. In making the tentative list of secondary schools, it is the plan of the commission to select only those which, beyond question, would be approved by all colleges in the association. It seems wiser to make, at the outset, a list which can be extended gradually, rather than a list which will need cutting down later."

DISCUSSION

DIRECTOR GEORGE N. CARMAN, of Lewis Institute, Chicago, in discussion of Professor Dexter's paper, gave an instance of the embarrassment due to a lack of correlation between the secondary schools and one of the larger eastern universities.

PROFESSOR JOHN C. HUTCHINSON, of the University of Minnesota, spoke in favor of the examination of the school, rather than of the pupil, and explained in detail the organization of the high-school board of the state of Minnesota.

PRINCIPAL E. V. ROBINSON, of the high school of St. Paul, Minn., called attention to the importance of provision by the colleges for credit to the students of the larger high schools who have done more than the college requirement in certain subjects. He spoke of the demoralizing effect upon the pupil of being forced to duplicate such work in the college. Very careful inspection of the schools would of course be necessary, but that would be welcomed by schools competent to do advanced work.

Director Carman replied that such a scheme was perfectly feasible, and expressed his regret for the prevalence of the idea that the universities are *ipso facto* infallible, and the schools *ipso facto* fallible.

F. P. Keppel, of Columbia University, New York, raised the question of the necessity, in the case of technical schools, for a strict system of entrance requirements, with comparatively little elasticity, and consequently frequent embarrassment to students. He believed that it was impossible to allow the same leeway in the case of these schools as in the case of the "old-fashioned" college, with its elective courses.

Professor G. W. Knight, of the Ohio State University, emphasized this distinction between liberal and technical courses, and the necessity for a different policy with regard to their entrance requirements.

In reference to Professor Dexter's paper, Professor Knight said, further, that in his experience there was difficulty in obtaining at the colleges a really honest certification from certain secondary schools, and that, mainly on this account, a doubt had arisen in his mind within the last few years as to the efficacy of the certificate system as a whole. President Northrop raised the point that it was most difficult to provide efficient checks for moral dishonesty in any stage of the pupil's education. Professor Knight replied that, if some official supervising body, independent both of the colleges and the schools, could be devised, most of his objections to the certification system would be removed.

President J. L. Snyder, of the State Agricultural College of Michigan, spoke of the danger to the schools of laying their emphasis on the one pupil who is planning to go to college, instead of on the nine who will be unable to do so. Professor Dexter called attention to the great elasticity of the entrance requirements of the universities of the Middle West, and stated that there was no reason why the high schools should suffer in the way that Professor Snyder suggested. Professor Dexter stated also, as an evidence of the growth of an organized system of advanced credits at the University of Illinois, that, altho the requirements for admission prescribed only thirty-six units, the average number of units offered by entering students was no less than forty-two (forty-four?).

Principal L. H. Ford, of Webster City, Ia., brought to the attention of the Department the difficulty which the smaller high schools, with limited resources, and frequently under illiberal boards of education, found in meeting the requirements of the colleges, and made a plea for a policy on the part of the colleges liberal enough to make it possible for any graduate of one of these smaller high schools to enter the colleges. Mr. Ford raised a question, also, in reference to Professor Knight's experience as to the dishonesty of certificates from secondary schools, as to the universal honesty of the certificates issued by the universities to the teachers whom they send out to work in the high schools.

In answer to inquiries, Acting President Folwell explained the make-up of the Minnesota high-school board, and the manner in which the examiners of the schools are, indirectly at any rate, under the authority of the university. He explained also the system of bonuses for such schools as prepare students for one or more of the courses of the university and are willing to submit themselves to examination by the high-school board. He stated also, as an interesting development of the system, that the scheme of bonuses had now extended down into the district schools and graded schools.

Principal Charles Alden Smith, of the high school, Duluth, Minn., in a discussion of Director Carman's report, emphasized the value of a uniform and definite statement of entrance requirements to ambitious schools. He said, also, that the results of the inspection of schools worked most happily for the uplifting and inspiration of the latter. He mentioned, with approval, the development of the crediting system now in practice at Cornell University and other institutions, whereby the college sends back a report to the school regarding the work done by its graduates.

PROFESSOR JOHN F. BROWN, high-school inspector for the State University of Iowa, speaking from the standpoint of the high schools, showed the advantage to the schools which comes from the inspection system, and cited instances where the recommendations of the inspector, altho without official authority, frequently brought about reforms in the schools which the principal, unaided, had been unable to get thru the board of education.

PROFESSOR THOMAS NICHOLSON, of Cornell College, Iowa, called attention to the movement in Iowa, which had been very successful and valuable. There the state university and the other degree-conferring institutions had united, thru the college department of the State Teachers' Association. They had first agreed upon certain minimum conditions in number and scholastic ability of professors, equipment, etc., without which an institution should not be recognized as "a college." The fifteen institutions in the state which fulfilled, or more than fulfilled, these requirements had organized a state board, composed of representatives of the colleges and the high schools, the object of which was to improve the educational conditions by voluntary co-operation. The result had been very gratifying. The best of feeling prevailed; the reduction of the recognized degree-granting institutions from twenty-three to fifteen had dignified the college degree in the state and had tended to stop cheap institutions from competing for students by lowering requirements and deceiving the ignorant. This board had made an accredited list, uniform for all the colleges, had secured uniform entrance requirements for the colleges of the state, had agreed on certain allowances for subjects not in the regular entrance scheme, but which certain high schools were compelled to teach. It had been able to prescribe kind and quality of work and to materially aid the high schools to better courses and to more efficient work. They had issued a high-school manual, which was approved by the general association of the state and the state superintendents, and which was doing much good, and had also developed a uniform system of blanks, used by all the colleges and containing a place for the entry of the student's record in every subject legally taught in the Iowa high schools. The principal certifies to this detailed statement, and not merely to the fact that the student has graduated from the high school. A complete copy of the scholastic record of each applicant is, therefore, on file in the college to which he goes, and it affords a means of checking up any accredited school where there are deficiencies or where poor work is being done. Professor Hutchinson explained that much the same system in this last particular was in successful operation at the University of Minnesota.

PROFESSOR FOLWELL, the acting president, closed the discussion by stating as his opinion that the contest between colleges and fitting schools will never be composed until the secondary schools are given their full scope. The colleges must at length yield to these schools about two years of work. The schools will then complete the instruction of youth and turn them over to the university to proceed with advanced studies. So long as colleges and universities are engaged in part in conflicting secondary education there will be contests over the division line between themselves and the high schools. When the whole secondary education is committed to the secondary schools there will be nothing left over which to contend. This question was discussed in an address by the speaker before the Association in 1875.

ORGANIZATION OF EDUCATION IN BRAZIL

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When some eighteen years ago I was called upon to return to Brazil, to take up the educational work in which I had been engaged in the late 50's and early 60's, for the purpose of reorganizing a small American school and developing from it a system of education which should be distinctly American in spirit and purpose, the first thing I found it necessary to do was to discover if possible what our American system was. I very soon found that American institutions differed very widely among themselves, and also from those of the Old World; that the American college and university was at once something more and something less than the institutions of Europe bearing the same name; that we had not yet any clear and well-defined limit or scope of action either in university, college, or school; that our college had no exact analogue in European systems; and that, while the older institutions of the East had fairly stable, and in some cases stereotyped, processes, those in the middle and western states were irregular, erratic, and partook of the progressive and expansive nature of life in those regions. I found that the attempts to take over into Brazil *en bloc* any of the European systems had retarded rather than advanced the development of a distinctly American system. Unfortunately, names did not then and do not now stand for much in our educational parlance; they seem to have drifted away from their etymological moorings and lost their historical connection. (They are beginning to recover them again.) I was much perplexed. I had set about to adapt to and ingraft upon a Latin-American society, whose social condition, political aspirations, and future importance in the history of America were somewhat analogous to those of this, our Anglo-Saxon America. I set about resolutely to learn what we were really doing and to infer from it what we wanted to do. I sought a solution of the question in the official organization of courses of study, which usually covers the whole domain of knowledge, and in the voluminous reports of state superintendents and college presidents. I attended the great educational conventions, studied the varied literature of the subject, and made extensive personal inspection of work actually done in college and school. In some places there was genuine education, in others simple instruction and drill for examinations, (not a whit better than the Chinese.) There was such a lack of uniformity of thought in organization, methods, and even in principles, as to raise a doubt about our having any distinctively American system of education. Yet the products of this *olla podrida* were so characteristically American that I felt there must be something among the essentials that was common to all these varied institutions. I made an extended inspection of European institutions, for a comparative study, and found many special processes and devices that could be appropriated, and, singularly enough, found that some of the German methods had their best development in the United States, but that no complete system could be profitably taken over as a whole. The great problem of how best to influence the heterogenous masses which flock to the shores of both Americas, and transform them into good citizens, is not touched by European systems. It is not exactly how to teach this or that special branch, but how to co-ordinate the work and relate all branches to the rapidly changing conditions of American society, respecting the rights of the pupil, of the parent, and of society at large; to make the most efficient men and women who can *do* and *be* as well as *know* something, and also to prevent, as far as possible, waste of time and energy.

We found it difficult to follow the vertiginous activity of American educators along all lines, or to wade thru the voluminous literature which accompanies it, brought from the ends of the earth; but, believing that there was a truly American system in process of development, we tried to catch the trend of thought and anticipate the results. Entirely free, unhampered by politics or precedent, with no fads or need of seeking favor from governments or patrons, but at liberty to select what was best from all sources, it will be readily conceded that we had a decided advantage over the educational reformer of our own country.

The following, in very brief outline, has been in operation for fourteen years at San Paulo, Brazil, as the result of our study, and has been eminently satisfactory; so much so that it has been applied to the public schools of the state.

1. A *primary school* of five years with a minimum of one hundred school days of five hours each per annum for the ungraded country school, and 210 (a full school year) for the graded city schools. This course has for its spinal column reading, writing, and the four operations of arithmetic. Arithmetic is made the test of advancement, but great attention is also paid to expression and language, and very early are introduced small vocabularies of the two modern languages that later are to be studied systematically, using the natural method — French and English by French and English teachers. This is done with pleasure and profit to the pupil. Thus in the very beginning of school life the habit of comparing modes of expression is cultivated, which later will be applied to processes of thought. Thru geography the study of nature is begun, and our relations to the world in which we live are studied; thru manual training and the drawing preliminary to it, things and their relations are studied, and the child is taught to see and do as well as to think. This is that part of education which society, for its own safety, must demand for every girl and boy in the land. It is all that can be given to the children of the masses, the very poor, the wage earner, who must go to

work early in life. This is the five years of compulsory education. Very bright pupils with intellectual surroundings may complete this course easily in four years, as many have done far better than others in five.

2. A secondary course of four or five years. This is an expansion of the primary, extending mathematics and other branches to meet all requirements of practical life; cultivating carefully the mother tongue; giving systematic instruction in two modern languages; thoro training in Brazilian geography and history, with outlines of general history and geography; manual training, mechanical drawing, etc. This section embraces that part of a tax-supported education essential to good citizenship, within the reach of all, but not compulsory—a combined grammar- and high-school course. It is a preparation for college, without, however, special reference to a college course. In it the two modern languages are finished, so that in subsequent work text-books in English and French may be used; algebra and geometry are studied, Latin begun, etc.—going about a year beyond the best grammar-school course of the United States. This completes the common-school system and prepares the pupil for the higher duties of citizenship. The bright pupil who has finished the primary course in four years may complete this in five. It has frequently been done, and is the rule for those preparing for college. The student who does it is ready for our gymnasium course at fifteen years of age.

We thought that in the great rush of utilitarian ideas in education we perceived a tendency to return somewhat to the humanities, and enrich the secondary school with studies heretofore included in the advanced courses, and thus shorten the higher course. This is the language period of life, and experience has shown us that two modern languages can be easily carried parallel to the mother tongue with benefit to the pupil. It furnishes excellent mental discipline, and has the advantage of awakening the habit of comparison earlier in life. There is a slight sacrifice on the mathematical or scientific side, which is pushed into the next division, where it logically belongs.

3. This step embraces three years of a culture course for that comparatively small class who desire to take a profession, or wish a liberal education in literature, art, and the sciences, as a stepping-stone to still more advanced studies. Entrance to this class ought to be guarded by severe tests in order to exclude the weak-brained who want a degree simply as an ornament, and because they can pay for it. The brainy poor young man or woman can always find means, if worthy. This is the college, properly speaking, reduced to three years—a gymnasium or maturity course. It lies between the public school tax-supported system and the specialized university courses—not absolutely necessary, but highly advisable. It is where the student is thrown into the larger current, and takes on certain responsibilities, and enjoys certain of the privileges of manhood, either to prepare for entrance into higher spheres of life or to

pursue other studies. This gives us, in briefest outline, a minimum of school life at public expense of four or five years and a maximum of eight or nine years.

4. We have not yet been able to carry out fully our ideas in the development of higher courses, but have a beginning of university work. At the end of the maturity, culture, gymnasium, or college course, whichever you may choose to call it, we have three courses, entrance to which may be elected and specially prepared for at the end of the first year of the gymnasium course: (1) a course of general science; (2) a course of specialized engineering; (3) a course of letters—all pursued on the free university plan. Up to the end of the gymnasium course we take charge of the individual, studying his peculiarities, developing his powers, molding and cultivating the intellect and the character, adjusting the work to the individual. In university courses we leave the student entirely to himself, laying great stress on the subject-matters, which are cultivated to the fullest extent our equipment will permit. The student must take what he can. If he cannot take enough to carry him thru, he drops out by the way.

Education will, therefore, under this plan, be finished at these ages: the large class of the very poor, who go under compulsion, at ten or eleven years; another class will go out at the end of the secondary, and enter society fairly well equipped for the ordinary pursuits of life, at fourteen or fifteen; a still smaller class completes the liberal course — the gymnasium, culture, or maturity course—at seventeen or eighteen; while the winnowing of all classes produces a comparatively small group of scholars and professionals who are able to enter life fully equipped with such formulated knowledge as can be obtained from books and lectures, at twenty-one or twenty-two. The student who skips the gymnasium course and short-circuits from the secondary to the university may, in exceptional cases, graduate from his professional course at nineteen or twenty, but will always lack that something which enables the man with brighter culture and severer discipline to win in the race of life.

The points in which the foregoing differs from the plan commonly adopted in the United States are: The introduction of two modern languages at the language period of life, for their own value, to improve the study of the mother tongue, and to develop earlier the comparative processes of thought, as mental discipline; the shortening of the college course to three years and reducing the sum of school life by at least two and possibly three years, leaving some of the enthusiasm of youth for the first years of independent self-supporting life, and also shortening the period of parental support. The young man is divorced from the dry process of digesting knowledge formulated by others, and left free to evolve his own formulas and adjust them to his environment.

The kindergarten was introduced into our work, tho we do not consider it a necessary part of a tax-supported system of schools. It has, however, taken root, and is a part of the public school system of San Paulo. Manual training was introduced, as an essential element, from the third-year primary work to the end of the secondary course. It too has been ingrafted upon the public-school system. The teaching of science in the laboratory with less dependence upon text-books has also become an important feature. Athletics, as a most useful and agreeable adjunct, have been introduced and have spread thruout the land. The development of power thruout the whole system, instead of the cultivation of verbal memory, and cramming for examinations; the stimulating of the sense of personal responsibility on the part of the educator to society, and on the part of the student to himself; and the furnishing of a sound ethical basis, from a biblical standpoint—are distinguishing features of our work. Coeducation for the first time in any Latin country is successfully carried on from the kindergarten to the university course. This, too, is becoming a part of the public-school system.

No attempt has been made here to indicate the exact organization of the various courses, the plan of correlation, or the specific methods employed; the purpose and logical distribution is what is sought to show. We have been able to see the finished product of the system and feel sure it is an improvement upon the old plan. This is the system of schools known as "Mackenzie College" and the "Eschola Americana," at San Paulo, Brazil, and is intended to serve in a modest way as a model of American education in Brazil. As to whether it is good or bad as compared with the very good, or simply good as compared with an effete system, atrophied by centuries of obscurantism, we cannot decide. The results are good in the sense of producing good men and women, of attracting the flower of the youth of the land, many of whom would otherwise go abroad for their education, and of keeping us constantly at high tension to provide for those who knock at our doors — the number being always in excess of our accommodations.

One of the problems that confront the people of North America is to decide what they are going to do for the people of the rest of America. When they have done with the Philippines, annexed the West Indies and educated their people, finished with Africa, China, and India, their attention may be attracted to the needs and possibilities of their next-door neighbors on the south. I am inclined to believe that in the not very remote future there will be but one America, if we do our duty faithfully and promptly — one at least in aspirations, high ideals, civic courage, and largeness of life, all their attributes growing in some measure out of the grandeur of nature and the broadness of the land. The Americans of the South, will not they differ from those of the North much more than in our own country the inhabitants of the different states differ from each other? I believe that our fellow-Americans on the south have a just claim upon us for help; they are handicapped in the race by three or four centuries of wrong teaching and wrong thinking, and have naturally reacted from the despotism of such teaching into a state of unbelief and inability to evolve for themselves any new plan of national regeneration. They are willing and ready to receive what we offer that is good.

I was glad to hear from a very prominent educator, at the general sessions last evening, a strong plea for the reintroduction of the Bible into the schools, not for the teaching of formulated religion, but as the groundwork for a code of ethics, as history, and as pure literature. We felt flattered by this part of the address, because we have held it in our work in exactly this way for the past fourteen years.

THE FUTURE OF GREEK STUDIES

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It is hazardous to name a baby before it is born or a paper before it is written. Your Jack may turn out a Jill; your prophecy only a preachment. Something of the sort, I fear, has befallen me. I thought to discuss in a constructive way the Greek program of the future; but I found myself confronted with the thesis that Greek is already dead, or, at best, unfit to live. And so my plea to set aside the coroner's verdict and to establish the fact and the right of survival has left me but scant time to outline the program I had hoped to discuss.

The paper as it is aims to show: (1) That our civilization is so rooted and grounded in the Greek that we cannot scuttle out of Greek without risk of a reversion to barbarism; (2) that Greek studies are not waning, but waxing in practical as well as in ideal value; and (3) how these studies may be made yet more fruitful in our national life and culture.

To begin with, this is more than an academic question. It is in the last analysis an issue of civilization. Our most precious inheritance as an Aryan or Indo-European people comes to us from Greece—our elder sister, firstborn daughter of the west, whose matin song (the *Iliad*) is the real overture to modern history. Indeed, Shelley was more than half right when he said: "We are all Greeks. Our laws, our literature, our religion, our arts—have their roots in Greece." And John Stuart Mill, after indorsing the doctrine that "The true ancestors of the European nations are not those from whose blood they are sprung, but those from whom they derive the richest portion of their inheritance," goes on to say:

> The battle of Marathon, even as an event in English history, is more important than the battle of Hastings. If the issue of that day had been different, the Britons and the Saxons might still have been wandering in the woods.

Bold as they seem, these are words of truth and soberness. If our freedom was won potentially at Marathon, so was our civilization; for that day made Athens, not the school of Hellas only, but the school of the world and the ages. It was the inspiration of deliverance, the new wine of liberty, that made that fifth century the high-water mark of the human spirit at its flood tide of reason and beauty. That sunburst of human genius is to this day the light of the world in the whole range of reason and imagination, of civil and spiritual liberty, and — in a far higher degree than we realize — in the realm of the conduct of life.

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But, it may be asked, does the conservation of the Hellenic element in our civilization, the maintenance of the Hellenic idea in modern life, depend upon the study of Greek? That is a question to be answered without prejudice; and I may call a witness who cannot be charged with the Greek bias. Chancellor Andrews, of Nebraska, has more than once handled the Greeks without gloves; but in a recent address on "The Social Need of Greek"— a massive and masterly statement of what we owe to Greece— he concludes:

> Even this passing look into the rock whence we were intellectually hewn and to the hole of the pit whence we were digged must, it seems to me, impress every thoughtful man that no modern community can, as a community, dispense with Greek studies unless it elects to be barbaric.

That is sound doctrine. And yet Dr. Andrews' own community now elects to be barbaric by banishing Greek from its high school because only thirteen (unlucky number!) elect to continue the study; and my own college has just disestablished Greek — relegating it to the same shelf with Sanskrit and Assyrian — on the plea that the sacred right of election must have freer course. (I may remark in passing that, after disestablishing Greek, my modern colleagues at once proceeded to establish their several studies, so that the last state of election among us is far more straitened than the first.)

The social need of Greek can be met only by the individual study of Greek; neither religion nor culture can be got by proxy. The war on Greek is therefore a social war; or, to put it bluntly, a war on society. And it has been fought largely on false pretenses. When Charles Francis Adams flung the gauntlet to the college fetich — that man of straw that he had sat up o' nights to fabricate — his challenge ran: Not only is Greek a dead language, but it bears no immediate relation to any living speech or literature of value; ergo, Greek must go! Now, note the bedrock evidence on which the case is rested. Mr. Adams himself had read the whole of Homer in Greek and then forgotten the Greek alphabet. John Adams had read the whote of Plato (not in Greek), and confessed that Plato had taught him but two things, the more important one being that sneezing is a cure for hiccough. And the evidence swells to damning proof as our fetich flayer traces thru five generations the tribulations of the Adams family—all along of Greek. It was his profound knowledge of Plato that tongue-tied John Adams in French when he was our envoy at Paris; and it was the forgotten alphabet of Homer that played the deuce with the Union Pacific under Charles Francis Adams' management. And this is not a circumstance to the mountains of obstruction piled upon the might-have-beens of Adams' greatness—by Greek! Now, it may have been Greek; but somehow the Adams family has managed to make a living in spite of it. Indeed, Professor Peabody has remarked that about the only thing the Adamses can complain of is "their failure to become a race of hereditary monarchs." And who knows but that Greek has thus acted as a brake against derailing, or at least sidetracking, our democracy?

As an old fogy, grown gray in coddling the college fetich, I can hardly claim a hearing on this subject from people with red blood in their veins and heads full of hard facts; but even the hardheads may have ears to hear the judgment of one who, as man of letters and man of affairs, has hardly had his peer among the moderns. In his great secular oration at Harvard, James Russell Lowell does not flinch from the Adams challenge:

> I know (he says) that I am approaching treacherous ashes which cover burning coals, but I must on. . . . . I am familiar with the arguments for making the study of Greek especially a matter of choice or chance. If the classical languages are dead, they yet speak to us, and with a clearer voice than any living tongue. If the Greek language is dead, yet the literature it enshrines is crammed with life as perhaps no other writing, except Shakespeare's, ever was or will be. It is as contemporary with today as with the ears it first enraptured, for it appeals, not to the man of then or now, but to the entire round of human nature itself. . . . . The most justly balanced, the most serene, and the most fecundating minds since the revival of learning have been steeped in and saturated with Greek literature. We know not whither other studies will lead: we do know to what summits, far above our lower region of turmoil, this has lead, and what the many-sided outlook thence.

Over against Mr. Adams' bald assertion that Greek has nothing to do with any living literature of value, let me set the deliberate judgment of one of the choicest English scholars of our times—Francis Palgrave, long professor of poetry at Oxford:

> The thorough study of English literature is hopeless, unless based upon an equally thorough study of the literature of Greece and Rome. To know Shakespeare and Milton is the pleasant and crowning consummation of knowing Homer and Æschylus, Catullus and Virgil. And upon no other terms can we obtain it.

But the head and front of its offending is that Greek is a dead language, a nasty college fetich which not all the science of the age can disinfect and sweeten. On this point let us hear the foremost English historion of our time—the historian of the Norman conquest and of Sicily, a man as much at home on the Acropolis of Athens, where he thinks the world's political history begins, as is Mr. Adams on his farm at Lincoln. Says Edward A. Freeman :

> I claim for the Greek tongue its place . . . . because it is not dead, but living; because, if it is ancient, it is medieval and modern no less. If it is the tongue of those who of old beat back the Persian, it is no less the tongue of those who in later times beat back the Saracen, and who won back the soil of Hellas in one age from the Slav, and in another from the Turk.

Verily, we are compassed about with a cloud of witnesses ; and their witness is true. If there be any college fetich in the sense of an outworn discipline or a superannuated culture, it is not Greek. Among the progressive sciences of our day not one has made more marvelous progress in the last quarter century than what, for want of a better name, I may call Hellenics. I do not mean that pinpoint on which Mr. Adams essayed to rear his pyramid, namely, Greek grammar with its forgotten alphabet. Our Hellenics is a mountain range which makes him who scales it the spectator of all time and all existence. It is the volume of the best thought and deed of the most gifted race the world has yet seen — a race that fixed the great types of literature and art in such absolute perfection that milleniums have passed without approaching them. The world knows but one *Iliad*, but one Parthenon, but one Olympian Hermes; and it will know none other save as we turn from burying Greek to unburying Greece.

That way lies treasure yet untold. Open your eyes for a moment to the light that has already broken forth in our own day. There is Homer, the oldest, vividest, completest transcript of the civilization which is our heritage. What science of the laboratory can today put into student hands raw material comparable to the Homeric texts, the prime source of European history and culture? Instead of faring afield for fossils to set up in a museum, the student of Hellenics can buy for a dollar and carry in his pockets these great original sources in a more perfect text than Pericles could command. And we are in a far better position to study them critically than were the men of Pericles' time, or of any other time between Pericles and Schliemann; for, thanks to Schliemann's simple faith and tireless spade, seconded by the sound science of Dörpfeld and Tsountas and Evans, we can now confront the poet with the actual objective realities that entered into the life of which he sang. We can walk round the walls of Mycenæ and Troy and count their towers; we can enter the palaces where Proitos and Agamemnon and Idomeneus and Priam dwelt; we can handle the swords and scepters, the signet rings and diadems, wielded and worn by monarchs who were dust before the king of men passed out of the Lions' Gate to win back Helen from Troy. We have recovered the very goblets and tankards that went round the festal company as they quaffed the honey-hearted wine or made libations to their gods.

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Thus we had recovered the real background of Homer. Yet, with all its wealth of art, it appeared to be an age without an alphabet — to have left no written record of itself. But that is no longer the case. In October, 1899, I stood in a rough-plowed field in Crete, where I knew Minos had reigned before Moses took down the law on Sinai. It was the most unpromising ancient site I ever examined; but a few months later Arthur Evans, whose house I occupied at Candia, near by, put in the spade there and laid bare the Palace of Knossos, which was perhaps two centuries old when Idomeneus went out from it to the siege of Troy. In that palace he found, for one thing, a wall painting of a young lady in full colors, now certainly the oldest girl in Europe. But what is epochmaking in Evans' find is a whole series of inscribed tablets, probably the palace archives. These inscriptions are in a native alphabet, indefinitely older than that which the Hellenes borrowed from the Phœnicians and handed down to us; and the key to that alphabet is yet to be found. It took fifty years to decipher the cuneiform records of Assyria, over twenty to make out the hieroglyphics of Egypt, and the problem presented at Knossos may well prove tougher than either of these. But when these records are read, as read they will be, we shall have pushed authentic first-hand European history a thousand years or more back of Herodotus. It was here in Crete Zeus wedded Europa, and their son Minos was, strictly, the first European. Thus the cult of the college fetich carries us back to the cradle of European history.

Nor is this the sole Cretan contribution of this dismal cult to our knowledge of ourselves, for all this is of our family record. From old Knossos I rode over the bare mountains — relieved mainly by ruined villages which mark the retreat of the unspeakable Turk — a long day's journey to Gortyn; and there, a stone's throw from the church in which Titus ministered, in the inner wall of a circular building (doubtless the town hall), I studied the oldest autograph code of European law. It covers 150 square feet of stone, in 12 columns of over 600 lines, and the printed text of it is longer than the Constitution of the United States. Minos, you remember, was not only a mighty monarch, but the first European lawgiver. Every nine years he went home to his father, Zeus, to receive the law from the Olympian lips, as did Moses from Jehovoh in the mount. Possibly the old palace may yield up the original tables; but meantime we have in the twelve tables of Gortyn a code of law humanely safeguarding the rights of women, children, and slaves, which was chiseled down before Plato wrote his laws, possibly as far back as Solon. Is not the great inscription found and read by our Hellenists since some of you were born as well worth knowing as any fossil from the Bad Lands?

And even the tombs are giving up again the masterpieces of that marvelous literature. In my house in the Lyceum, where Aristotle wrote it, I had the felicity to read eleven years ago his "Constitution of Athens," then just come to light after being lost to the world a thousand years and more. Ten years ago, when I made a pilgrimage to the native island of Bacchylides, we had, all told, but a hundred fragmentary lines of that poet. For six years now the poems of Bacchylides, since recovered from an Egyptian tomb, have been among the choicest courses in our curriculum at Brown. And these are but the earnest of greater things to come. The barbarians have taken Athens. Germany, France, England, America have there planted their schools for the study and restoration of classical antiquity. Already the Germans have restored to us Olympia, with the priceless Hermes of Praxiteles; the French, Delos and Delphi; the English, Megalopolis; while our own countrymen—after uncovering Ikaria, Thorikos, Sikyon, and Eretria—are now delving away at Corinth. Thus they are not only accumulating the raw material of Hellenics, but they are training Hellenists—men and women steeped in the atmosphere and saturated with the sweetness and light of old Greek life. As they return to radiate in our schools and colleges and universities, even the author of *The College Fetich* must regret the forgotten alphabet of Homer.

And he might find it no easy task to convince *them* that Greek is a very dead language. One who has lived among the most wide-awake people on the planet—a people who light their cigars as well as their streets by electricity; who turn down their ministry and make a clean sweep of the offices once every ten months on an average; who run more daily newspapers in their little metropolis than New York and Boston combined can boast; who print and read more books in a year than any other community of equal numbers in the world; who carry on a system of free public education from the primary school thru all the grades to a university as large and twice as troublesome as any of our own—well, one who was lived among these Greeks will hardly class them with extinct species.

And what of the vehicle of the marvelous intellectual movement one beholds at Athens? Books by the myriad, newspapers by the ton, schools at every crossroad, a people thinking and working out this complex civilization that might have confounded an Aristotle—these are not dumb, but speaking. And their speech is just the most wonderful thing about them. From the dawn of history Greeks have dwelt here and played their illustrious rôle on this tiny stage. The crowning credential of the fact is their language: if it were a crime to be Greek they would be convicted of it out of their own mouths, their tongues betraying them. From the *Canterbury Tales* to the *Merry Wives of Windsor* it was only two centuries; from the *Iliad* to this morning's *Acropolis* it must be twenty-eight. Yet Chaucer might have been more puzzled by Shakespeare's English than Homer by our newspaper Greek.

Talk of dead languages! In the whole family of human speech there never was a more lively and prolific shoot than this dead Greek.

How its grafts have enriched our own brave English! And are we not all steeped in Attic sunlight? Is not our literature shot thru with it as with thread of gold, and our language so saturated with it that we can neither enjoy the one nor comprehend the other save as we are in a measure Hellenized ourselves? Take up your bread and butter ologies and every blessed one of them bristles with Greek. Without Greek you cannot name a flower, nor classify a pebble, nor analyze a drop of dew, to say nothing of telling the stars or sounding the deeps of divine philosophy. Every new thought of man finds in it the fitting word, and science takes no step forward that it does not stop to register in Greek.

And what continuity of life! Look at the books we have just been reading at Brown: Homer, who was chanting the deeds of heroes heaven knows when and where in the gray morning of the world; Hesiod, who was singing the generatious of the gods and what he knew about farming almost as long ago; Pindar and Æschylus, who were building the lofty rhyme at Thebes and Athens; Herodotus, who was writing his great history in the fifth century B. C.; Theocritus, who was piping his sweet pastorals two centuries later; St. Paul and Lucian, who were, the one heralding a new faith and the other flouting an old one, in the early centuries of our own era; and along with these, Bikelas, with whom I was hobnobbing in Athens not three years ago! Ah, this dead language of ours is full of sap and quivering with life. It might have served the morning stars in their first matineé, yet the nightingales still sing in its branches and its leaves are for the healing of the nations.

When Sophocles was on trial for senility, he asked leave to rehearse a chorus he had just written, whereupon the court concluded that the poet was quite able to mind his own business. And, by the same token, the educational reformers who are now swearing out letters of guardianship or of administration on the person and estate of Greek may prove a little too previous. It is always inexpedient to call the coroner before you are sure of your corpse, or to send for the undertaker when the subject is at the top of his condition.

And that is the present state of Greek, both as a social factor and as an educational discipline. It was never before so rich in performance as well as in promise and potency as it is today. If education is to make men, it must be thru man-making studies; and, if you ask me what these are, I would answer: Whatever best disciplines faculty, widens vision, and ennobles character. In other words, education is to yield discipline, enlightenment, inspiration; and the value of any study is to be tested by the completeness of its response to one or more of these ends. The studies that respond to them all in harmonious and happy combination must hold the supremacy until we are prepared for a new eclipse of civilization. Central in such studies is the study of man as he utters himself in language and literature, in history, philosophy, religion

—the humanities in the widest and noblest sense, fragrant with heroic memories, with lofty ideals, with holy aspirations. The schools that leave this range of mind to choice or chance, to be taken or left at the pupil's whim or caprice, are false to the very idea of culture. And in the humanistic group Greek still holds the center. In the memorial of the Philosophical Faculty of Berlin asking the government to reconsider its action in opening the universities to graduates of the Realschulen, professors of mathematics, astronomy, chemistry, zoölogy, economics, philosophy, English, and German—each speaking from the standpoint of his own specialty—pronounced the non-classical men inferior to the classical when it came to university work in the very subjects emphasized in the Realschule training. And the judgment of the faculty is summed up by Rector Hofman (a chemist) in these strong words:

> That all efforts to find a substitute for the classical languages, whether in mathematics, in the modern languages, or in the natural sciences, have been thus far unsuccessful; that after long and vain search we must always come back finally to the result of centuries of experience; that the surest instrument that can be used in the training of youth is given us in the study of the languages, the literature, and the works of art of classical antiquity.

In this verdict we may with full warrant read the specific vindication of Greek, for the Realschüler, as such, bring to the university a seven-years' training in Latin. But as an accomplished Latinist—Professor West, of Princeton—has recently urged (*Atlantic Monthly*, December, 1899, p. 827), Latin can never be taught in its full attractiveness without Greek.

> It may be taught with advantage, with great advantage, but without Greek it cannot be taught to the best advantage, because it is cut off from a large range of important illustration and support. . . . . Classes studying Greek and Latin regularly surpass classes studying Latin alone.

And this for a very plain reason: Greek is in Latin, but Latin is not in Greek. And Palgrave's claim for the study of classical literature as the only road to mastery of English is yet more valid for Greek as the indispensable key to Latin. The young Grecian finds himself at home with Cicero and Virgil; the young Roman has a world of things to learn before he can breathe the atmosphere of Plato and Sophocles. And so, as Mr. West tells us, to get the best Latin you must study Greek. And he adds:

> The two are one study, after all, and the one is Greek. . . . . Greek is today the schoolmaster of studies as truly as ancient Greece was the teacher of the young western world.

As an ideal discipline, then, Greek holds a unique position; but we are told that as actually taught it is dust and ashes, dry bones, unrelated scraps, gerund-grinding, *et id omne*. And yet the great apostle of modern studies among us holds up "the training given by the classical sides of high schools in Latin and Greek" as the standard of merit to be aimed at in the teaching of "modern languages, science, and history." (President Eliot in the *Atlantic Monthly* for October, 1899, p. 144.) And Dr. Andrews favors the teaching of Greek in the high schools because it is taught more fruitfully and economically than the sciences. But how stands the case in college? That there is unfruitful teaching in all lines goes without saying—Greek not excepted; but that Greek enjoys a bad pre-eminence in barrenness I cannot for a moment admit. On the contrary, even an average teacher is quite as likely to find inspiration in it, to say the least, as in any modern study; and, once inspired himself, he has the most inspiring of all subjects wherewith to work upon the mind of youth. Professor Münsterberg blesses the dispensation that steeped him in Greek as a German gymnasium boy, tho it brought him to his chair at Harvard without ever having spoken a word of English, because in Greek he found his inspiration as a psychologist, and so had something worth saying in English when he got to it. And, on a rather large and varied experience in the calling, I make bold to say that Greek as taught in our colleges is as fruitful as any subject in the curriculum. Other things being equal, including that vital factor of the teacher's personality, I believe it the most fruitful study we have. It opens wider and higher horizons, it admits to nobler society, it yields a larger return in fresh ideas and grand ideals than any modern subject. The ethical value of Greek study has been called in question; but no open-minded student who approaches Greek literature in a teachable spirit can fail to find in it a means of grace as well as an instrument of culture. The great Greek writers are ethical to the core, as clean and wholesome in their tone and tendency as they are matchless in their art. As moral teachers the Greek tragedians are hardly second to the Hebrew prophets; and they appeal to us the more because they are our kinsmen. And what is Plato but a library of ethics—not simply in the abstract, but applied and hammered in? The platonic Socrates is a preacher of righteousness, who leaves us no ease in Zion, who strips us of the last rag of our conceit, and compels us to reckon squarely with reason and conscience. And he is still the best normal school we have.

Not only have we the original and inspiring sources, but they are practically inexhaustible. In range few teachers have the advantage of us. If we keep threshing over old straw, it is because the root of the matter is not in us. Even the secondary teacher may prepare eight successive classes in Homer without ever repeating a book. In the drama one may teach many years without repeating a play; so in Plato and Demosthenes. And, taking the extant classical Greek literature, one may teach a long lifetime without running short of fresh material. And now that long-lost authors are rising again from their tombs, we can set no limit to our potential resources in the literature alone, to say nothing of the history, archæology, and art.

The stock indictment against Greek has another count; not only is it useless, but it crowds out what is useful. It must lie over and make room. In fact, Greek is not exclusive of other subjects, but they of Greek. As Professor Clapp, of California, puts it:

> The classical graduate may be an expert political economist, while the social science graduate knows nothing of Homer. The classical graduate may have had forty or fifty hours of natural science, but the science graduate has never read a page of Plato. He will have to go to the dictionary for the meaning of the scientific terms which he uses every day, for most of them are pure Greek, and his classical friend can interpret them at a glance. The classical graduate can get more mathematics than the average professor of mathematics will ever use, but the graduate in engineering will never understand the classical allusions in English literature. The classical course is the truly liberal course, because it is the broadest.

And now how are we to shape our Greek program to the new conditions? With all protection broken down, and with every Philistine hand against it, Greek must depend for its survival (1) on its own inherent and inexhaustible vitality; (2) on a just social recognition of its unique culture value; and (3) on the wisdom of teachers in planning courses and their power in vitalizing them. On the first head, I have said enough. On the second, I may quote two of the seven "admonitions" with which Dr. Andrews closes the paper already referred to:

> All believers in a rich and rounded social education should feel, think, and act appreciatively toward Greek study.
>
> Colleges and high schools with reasonably ample facilities should be encouraged to continue teaching Greek if already doing so; if not, to begin.

So far so good. Society owes it to itself to give Greek a living chance in the academy, the high school, and the old-fashioned college, as well as to make adequate provision for it in the University. And we who teach Greek owe it to society to make our teaching fresh and vital and inspiring; to be ourselves true interpreters of antiquity in terms of modern life and thought; in short, to keep the living waters of old Greece flowing fresh in the currents of young America.

To accomplish this our studies must contemplate discipline, enlightenment, and inspiration. As I conceive, these ends may best be met by a program ranging somewhat as follows:

1. Careful foundation work in the language. We must master the vehicle, which is itself among the marvelous achievements of the Greeks and our key to all the rest.

2. Critical reading, never remitted but never exclusive, of masterpieces.

3. Free reading for literature only—e. g., all Homer; all Herodotus; much of Plato.

4. Still wider reading of Greek authors in English, where adequate versions exist, or rapid interpretation by the teacher, combined with literary history and criticism.

5. The study of Greek history as written by the Greeks and illuminated by archæological discovery. This should make the student at home under Greek skies and in the Greek atmosphere.

6. The study of Greek life, public and private, in the light of the literature and monuments, to put the student in touch with the men and women of Homer, with the contemporaries of Pericles, with the Athenians of today.

7. The study of archæology and art—a subject of the highest culture value, and one whose material is increasing every hour.

This is but a tentative program, admitting of indefinite variation and expansion, and to be divided between the secondary school and the college, as occasion requires.

To speak of the future of Greek studies may seem to some to savor of irony; but, as an optimist, who believes that on the whole humanity is moving forward and not backward, and that it cannot and will not "afford to lose out of its inheritance any part of the best work that has been done for it in the past," I confidently expect Greek to outride the storm now blowing as she has weathered many a gale already. More than that, I hope to see her emerge from the present tribulation in newness of life and plentitude of power.

EDUCATION IN THE APPRECIATION OF ART

CHANCELLOR WILLIAM BAYARD CRAIG, DRAKE UNIVERSITY, DES MOINES, IA.

In our young and vigorous country we are great in science, respectable in religion, and weaklings in art. We have been too busy with the useful and practical in the material development of our new country to know or care much about art.

In the matter of government we have discovered foundation principles, and know how to talk about the rights of man and the functions of the state. An average American citizen feels himself competent to appraise the values of the various elements that enter into the ceremonial and pageantry of the coronation of a king. He is no longer overawed by the traditions and claims of hereditary monarchs. He is a fearless critic in political science.

It is a different matter, however, when the same average American citizen is asked to give his opinion of a work of art, a painting by Corot or Millet; a figure by French or St. Gaudens; or a building by Richardson or Mayer. All self-reliance and boldness are gone. He will probably utter a phrase of fashionable criticism, or, if he ventures an original remark, will pass on with a horrible feeling of uncertainty, fearing lest he has said something flat, ridiculous, or both.

The fact is that in art matters the American people are in the provincial period; they depend on Europe for their ideas and doctrine in art, as our fathers depended on England for ideas of government in the old colonial days. We are not appreciative students of art production and values, and will not have opinions of our own until we are delivered from slavery to conventional traditions, by learning and applying for ourselves the first principles of art.

We must be able to write a declaration of independence in the realm of art, as we have in the realm of politics. This is the essential beginning for a great national art that shall be the expression of the larger life, the new conditions, and modern ideals of our American civilization. The art of Europe expresses the life of Europe for a thousand years and more. We can make it ours for purposes of study, but it can never be our national art — the expression of our own life; that we must create for ourselves from the ground up.

In art development, as in everything else of a broad national character, we must lay the foundation in the hearts and minds of the common people. It is not true that our meager development in art is a racial defect. Art is not the birthright alone of the Latin peoples. It may be granted that the Italians, French, and Spaniards are more emotional in temperament, more sensitive to the appeal of beauty, more responsive to the efforts of their artists, and thus more easily stimulated to the point where art production begins; but the English speaking race are also, in their own characteristic manner, profoundly artistic. Chaucer sang of the common life of a practical people in a way that leaves no doubt as to the art impulse in the English heart. The English blood was warmed by intermixture with the original Celts in the island of Great Britain, by the later invasion of Celts from the continent, and by the conquest of England by the Latinized Normans. This intermingling produced a new and powerful race, that gave the world, not only the splendid pages of achievement and conquest in the times of Elizabeth, but also that unequaled chorus of singers and writers who group around the peerless Shakespeare. As the race of English-speaking people have spread out to the east in Australia, and to the west in America, their power and artistic genius have become more and more conspicuous. There is no room to doubt their capacity for art appreciation and production.

In our own land, the poets of New England, the novelists of the South, the sculptors of the West, the painters of New York, the White City on the inland sea, that arose as by enchantment, more beautiful than a dream, are all sure prophecies of the coming glory of American art.

How can it be otherwise? We are young and enthusiastic. Our ideals are high, our love of the beauty of nature profound and sincere, our feeling deep and strong. When we turn our attention seriously to the study and production of art, we shall greatly excel.

The purpose of this paper is to call the attention of college men to the need of education in the appreciation of art.

In a republic where opportunities for education and culture are provided for all, education in the appreciation of art should be a part of the educational scheme, and this must be done before we can have a truly national art at all, i. e., an art that expresses the deepest heart yearnings and ideals of the whole people.

Indeed it may well seem to the wise student of our national life that our civilization is seriously defective just at this point. We are in a new land, with vast undeveloped resources, and the lust of conquest possesses us. With machines of power and efficiency we are opening up our rich resources; the grime of our arduous toil is upon us; too often our minds and our souls are smirched by our slavery to the mill, the workshop, and the store; and we lose sight of the fact that there is something else to do in this world besides money making and its machinery. As a nation we seem to need the inclination and ability to see the vision of the artist and know how to read and appreciate the symbols by which he would impart to us the message of his heart, that he may minister to the joy and fulness of life.

An appreciation of art would open up a new channel for the amazing vigor and energy of our people, would open up for the slaves of labor, whether capitalist or workman, new fields of interest and pleasure, and in every way soften and adorn the hard and ruder spaces of life. Poverty would be enriched by discovering new sources of inspiration and pleasure at the free and bountiful table of nature, with its cloth of green spangled with "daisies and buttercups" under the azure pavilion of the God of beauty and of love. The sordid money getter, swollen with pride because of his success in the scramble for gold, would find a new life, with new meanings, when first enabled to buy with his money one real work of art for which a genuine appreciation had been awakened in his soul. It would keep the heart young and simple and sincere. It would preserve that invaluable something that was in the heart of Wordsworth when he said:

> My heart leaps up when I behold
> A rainbow in the sky:
> So was it when my life began,
> So is it now I am a man;
> So be it when I shall grow old,
> Or let me die.

We are the wealthiest people of the world, and the most intelligent; but the serious question yet remains: are we not still barbarians until we learn to appreciate the world of beauty, the realm of art?

We have made beginnings in the right direction. We have many schools of design and teachers of drawing. In some of our larger cities, especially in Denver, Colo., the cultured people are beautifying the schoolrooms with works of art, and striving as best they can to awaken and nourish delight in the beautiful. We are talking about the city beautiful. There are signs of a general awakening to the importance of the claims of the artist, and doubtless the movement will increase in power, because truth is on its side, until we shall have methods and teachers and text-books adequate to the results to be achieved. We must not lose sight of the fact, however, that it is not enough to learn how to draw or master some technique of art; the chief thing is to know how to appreciate art itself.

Tolstoi's book *What is Art* is given to the world by its author as the ripe result of fifteen years of study. The book abounds in peculiar marks of the genius of this great writer. All his conclusions will not be accepted as sane and satisfactory, but the work is rich in helpful suggestions.

He strips the subject of all perplexities and confusing verbiage; he emancipates the reader from the spell of tradition or the tyranny of the conventional, and brings the student face to face with the character and function of a true art product.

After quoting definitions from all the great writers since Aristotle, and noting their merits and defects, he offers his own definition of art as better than any of them, and undoubtedly he is right. He says:

> Art is a human activity, consisting in this, that one man consciously, by means of certain external signs, hands on to others feelings he has lived thru, and that other people are moved by these feelings and also experience them.

When one is able to grasp the full significance of this definition, the hitherto mysterious and complex world of art becomes simple and plain; a grammar-school student can understand it.

The artist consciously expresses feelings that he has lived thru in such a way that others experience the same feeling. That is a somewhat broader and fuller statement of a long-familiar doctrine, viz., that "art is the language of feeling." This is fundamental truth. The artist constructs a body out of words, lines, colors, clay, or other media; and out of his own emotional experience, out of his own fullness of inspiration, breathes into the form he has created the breath of life, and it becomes a living work of art.

Without this feeling imparted by the true artist, all high-sounding words, all deft combinations of lines, all splendor of color, all skilled manipulation of keys or strings, are dead things, like artificial palms and roses. Mere dexterity in handling material is not art in this high and true sense. Skill in technique is merely a refined form of mechanics, unless a genuine emotion of the heart is behind it all, seeking to impart itself to the heart and life of others.

When a student grasps this truth he becomes at once conscious of power in himself in the matter of art appreciation. He has learned to ask the first and all-important question concerning art production, viz., does the artist express in it a true emotion, in such a way that I am made to feel it with him?

A student is enabled by Tolstoi's help to make this good beginning in art appreciation without considering the elements of beauty in art at all, and I agree fully with him that the supreme aim of the artist is not to make a beautiful thing; his sole object must be to express the emotion that controls him, and the beauty will take care of itself.

What is beauty? The great writers on art have been trying to answer that question ever since the days of Plato, and the best they have to give us is this: "Beauty is that which pleases." The whole subject is remanded to the verdict of the individual. That which pleases your sense of beauty is to you beautiful.

There are a host of other definitions, but they can all be classified in two groups: one declaring there is no beauty in the world, it is only in the beautiful soul—idealism; the other declaring beauty to consist in lines, in proportion, in relation—materialism.

Ruskin and many of the great writers on art combine these extremes, and see the beautiful in the divine idea—the soul of all things; and also see the beautiful in the material body that the soul or the idea weaves for itself. This seems to be the only satisfactory view of the whole matter.

We may, then, agree with Tolstoi that beauty is not the end for which the artist works; his aim must be first and last and all the time to express the feeling that possesses him. But if the feeling is true and geuuine, beauty is inevitable in the product; it fits the ideas of the artist and belongs to it as the body belongs to the soul. The advance to the conclusion of monism is easy along this line—spirit and matter are one.

The foundation of art appreciation is the recognition of the all-dominant importance of feeling in the work of art. It is helpful to take the student back to the conditions of primitive life and note the development of art language, i. e., the progress in the use of the various media used by men for the expression of feeling or emotion as they advance from primitive to highly civilized conditions.

The young Indian wife in the joy of motherhood beautifies the clothing and cradle of the papoose with bead and quill and fringe. She coos over her child with gentle and winning intonations of voice. She is merely translating and recording the joy that throbs in her heart and shines in her eyes. She is an artist, and stands at the beginning of all that long line of domestic and decorative art-workers inspired by love for home and children — a love that will not stop with the merely useful and necessary, but under the inspiration of affection rises into the luxury of embellishment and beauty. It was this point of view that led William Morris to declare that art is the expression of joy in one's work.

The Indian who finally constructed a finished type of the birch-bark canoe, with its wondrous curves and contours, achieved a masterpiece of art—the perfection of utility, the perfection of beauty. The aquatic experience and emotions of a tribe thruout a millenium of its history can be felt in the study of the canoe. It is born of the womb of nature, and nourished at her breast; it is nature's own joyous product thru the agency of her child of the forest. The life of nature is in the canoe; it is as much a part of it as the deer or the water-lily, and is beautiful for the same reason.

The Indian birch-bark canoe builder is already far along in the art path with the best Indian basketry and pottery. Along that same line the artists advance to the Greek vase, the Parthenon, and all the triumphs of modern architecture.

The Indian lover bedecked with all the finery he possesses, showing off all his paces in dance or game before the maidens of the village, is animated by the same feeling that has created all music, all poetry, all literature and drama of romantic art.

The war party returning victorious from battle, giving vent to a very ecstacy of joy in leaping and shouting and declamation of deeds of valor, is an early prophecy of a coming Homer, the triumphial arches of the great capitals, and all the *Te Deums* and art monuments to victory.

It is interesting to study also the effect of limited material and limited ability on the part of the Indian to express his emotions. The emotion overflows the channels of expression. He had not reached a knowledge of sculpture or architecture or literature. All the emotions of the human heart were forced into few and narrow channels of expression. He could not express his sorrow for the dead in a splendid monument, but, selecting some bold hilltop overlooking a river or lake, he raised a simple mound of earth that seems to be saying evermore to the Great Spirit, to the rising and setting sun, to the great dome of heaven: We cannot express our sorrow; we bring our dead here; we lay him on this high altar; let the night and the day, the dark storm and the glorious sunshine, speak our hope and our grief for us. The Indian burial-mound is in itself one of the simplest forms of art creation; in the location selected it is great; it puts nature itself under tribute to express its feeling and purpose.

The dance is no longer an art product in America; it has been conventionalized into a meaningless whirl. It was a serious art product, however, for the Indian. He put into it his religious emotions, his joy, his sorrows, his hopes, his prayers. By the dance, he expressed the whole gamut of his emotions.

In primitive conditions the feeling that inspires art is the overwhelming fact. The technique of art is in its crudest and simplest beginnings. In our own times, skill in the manipulation of materials used in art expression is the overwhelming fact, and the feeling is often weak or conventional. Much that is called art today is merely a show of skill in technique; it does not reach the heart or arouse emotion. When one has learned to eliminate from the vast array of art products the large number of pictures, statues, and compositions that have no special value except as exhibitions of technical skill in handling material, he will find the whole art problem simplified and comprehensible. He will no longer be enslaved by the pretensions of the school or the dominion of the conventional.

In Millet's "Sower," in his "Man with the Hoe," in his "Angelus," the feeling is so simple, sincere, and strong that all the world responds. It is great art. These pictures tell with wonderful power the tragedy of the life of the peasant who conquered the ground with the hoe. Note how earth and sky harmonize with the subdued garb of the figures. You feel that this painter was under the dominion of a strong abiding sympathy with his theme from beginning to end. More than that, you feel that the picture tells of a profound experience in the heart of the artist. He never forgot his text in a single line; he could not.

Turn from Millet to Corot. Here again feeling is the dominant note. In some indescribable way the artist has made light and shade, the air, the mass of the trees, tell a wondrous story of the divine beauty that breathes in the landscape at morning, noon, and night. Yet both Millet and Corot were old men before honor and praise came to them. The artists of Paris scorned and ridiculed the heavy, awkward figures, the dull colors, and the lack of brilliant technique in Millet's work. He had disregarded the traditions of the technique prevailing in the Paris schools; he had chosen his own way to express himself, and had to wait until the great heart of unsophisticated humanity found him. It was much the same in the case of Corot. So it was with Burns, as in his own simple, homely way he told the story of the Highland cotter. He died in poverty, because his technique was faulty judged by fashionable standards. These are all recognized masters in the world today, because the inspiration was genuine. The true feeling was there.

It is not always necessary, therefore, to ask, what do the critics say of this or that work of art? It may be quite interesting and instructive at the proper time to know what others think, but the first question for each individual is, what feeling does the work arouse in me? Is it the product of true emotion in the heart of the artist, and does he make me feel the same emotion?

Another question: Has the feeling of the artist compelled him to make his composition a unit? This is an important point. The artist can have but one dominant feeling at one time, and under its sway all the parts of the body, all the figures in a group, or all the parts of a structure will arrange themselves in harmony and in proper relation to the central idea. In Munkaczy's "Christ before Pilate" there are many figures; judges, soldiers, officers of the court, the rabble—representing all phases of life in Jerusalem—and the prisoner.

The prisoner stands in the center, and you note at once that all interest is focused in him, and the common feeling makes the complex group a unit.

This unity will be found in the poem, the oration, the symphony, or in any other successful art expression.

The art product is an organic whole, like the human body, and throbs with the dominant emotional purpose — the life imparted by the artist.

It will be noted also that the real artist, under control of a dominant feeling, selects the most fitting words, the most effective color, the truest line. The stronger the feeling the more direct and simple the form of expression. See this illustrated in Lincoln's speech at Gettysburg; in Kipling's "Recessional;" in French's monument to the young sculptor Milmore; in the Parthenon; and in "The Man with the Hoe."

Under the dominion of genuine feeling the artist fulfils the laws of expression that demand vigor, directness, precision, confidence, authority. Love is the fulfilling of the law in this as in all other realms of human activity.

Finally, as the art product is an expression of feeling, the successful work will, by all the virtues already recited, and others we have no time to name, impress one as succeeding in its efforts.

Whatever the material employed, it must be translucent; the idea or sentiment must shine out.

Artists themselves, as a rule, have a great delight in the skill displayed in technique. It is the chief part of their profession to teach or practice the technique of art. Schools of expression cannot, of course, impart the feeling that makes the artist; that must come with birth. They can but help the artist to manipulate and control the materials he desires to use to convey his feelings to the hearts of men. Schools of expression tend to emphasize and develop technical perfection, often unintentionally slighting the feeling of inspiration. The process is often ruinous to the young artist with an inspiration.

Education in the appreciation of art must begin with first principles by helping the student to recognize the essential character of a work of art and understand its message.

DEPARTMENT OF NORMAL SCHOOLS

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 9, 1902

The department met in the Olivet Baptist Church in Minneapolis at 9:30 A.M., and was called to order by President J. F. Millspaugh, of the State Normal School at Winona, Minn.

A vocal solo, "The Gondolier," *Stewart*, was sung by Mr. C. S. Laird.

President David Felmley, of the State Normal University at Normal, Ill., presented a paper on "The Relations of Heads of Departments to the Training School."

Discussion was opened by A. P. Hollis, principal of the training department of the State Normal School, Valley City, N. D., and participated in by President Albert Salisbury, State Normal School, Whitewater, Wis.; P. M. Magnuson, instructor in history and social science, State Normal School, St. Cloud, Minn.; J. H. Paul, president of the Latter Day Saints University, Salt Lake City, Utah; W. W. Wallers, principal of the Eliot School, St. Louis, Mo.; President J. N. Wilkinson, State Normal School, Emporia, Kan.; Miss May H. Prentice, instructor in the City Normal School, Cleveland, O.; and President John R. Kirk, State Normal School, Kirksville, Mo.

The department adjourned to Thursday afternoon, July 10.

SECOND SESSION.—THURSDAY, July 10

The department was called to order by President Millspaugh at 2:30 P. M.

President Homer H. Seerley, State Normal School, Cedar Falls, Ia., presented a paper on "Defects in the Normal Schools that Are Responsible for the Opposition and Criticism Urged against Them in Many Parts of the United States."

L. Seeley, professor of pedagogy, State Normal School, Trenton, N. J., appointed to open the discussion, was unavoidably absent. By special request of the Department, approved by the Executive Committee, his discussion is printed in the following proceedings.

The following participated in discussion: President Albert Salisbury, State Normal School, Whitewater, Wis.; President John W. Cook, Northern Illinois State Normal School, DeKalb, Ill.; President Seerley; and others.

The following officers were elected:

For *President*—Livingston C. Lord, Charleston, Ill.
For *Vice-President*—Albert Salisbury, Whitewater, Wis.
For *Secretary*—E. L. Hewitt, East Las Vegas, N. M.

The department then adjourned *sine die*.

JOHN R. KIRK,
Secretary.

PAPERS AND DISCUSSIONS

THE RELATIONS OF THE HEADS OF DEPARTMENTS TO THE TRAINING SCHOOL

PRESIDENT DAVID FELMLEY, STATE NORMAL UNIVERSITY, NORMAL, ILL.

In order that any institution may do its work there must be unity in its organization; all parts must co-operate for a common end. The functions or relations of the various parts cannot be seen without considering the law of the organization as a whole. The law of an organization is to be found in its purpose. The purpose of the normal school is to fit its students for teaching children. It is a technical school in which knowledge is held of value as it ministers to an art. What anatomy is to the surgeon, or mathematics to the engineer, the various branches of study are to the teacher. In a sense, they are the instruments of his art. No teacher is really at home in his profession until he feels that the value of every subject, topic, or question is to be found in its influence in the development of the child; that lessons are to be judged, not in their individual nature, but in their final outcome. The teacher stands committed to the biological conception that knowledge is of value as it determines conduct. In the normal school the various branches of study are to be organized in the consciousness of the student, not so much with regard to their inner logical relations as with regard to the interests and aptitudes of children. The question is not merely, what is this body of thought that we call geography, for example, nor yet what portions are of most practical worth; but how shall the child proceed in acquiring this knowledge? What is the value of these experiences in his unfolding life?

Hence in the normal school the child occupies the center of the stage. Nor can this child be a mere abstraction, talked about, but never experienced or studied. The center of interest must be definite; some group of living, concrete realities.

If we have come into normal-school work after a somewhat extended experience in teaching or supervision, we can scarcely conduct a recitation without reverting to this early experience. Unless we see inchoate teachers on the benches before us, and are conscious of the children waiting beyond, whatever we may be we are not normal-school teachers. In the early normal school there was no training department. The instructors were men of tremendous enthusiasm, who had already won distinction as brilliant teachers. The memories of their own early experience in teaching children guided them in their work. But the students, even if they had taught, could not have before them the same children, or children under identical conditions; while the younger students had never viewed any group of children from the standpoint of the teacher. Now, we provide systematic work in observation for the younger teachers, to which class-room references must point if images are to be concrete and definite. The children in the training department are the living realities upon which the thought of teacher and student may focus. It is about them that all the activities of the normal school must revolve.

If this is admitted, it must follow that the training school must be more than a collection of classes for practice; it should be a model public school in its organization, conditions, and equipment, modified as little as may be by the demands of the normal school of which it is a part.

Normal-school instructors should feel that their departments exist only that teachers may be prepared for their work. This truth does not justify any of the hand-to-mouth work which seems the summit of aspiration in some teachers and normal students. The primary teacher who has read Shakespeare and studied ethics and economics we believe is the better teacher because of it. Her broader outlook and deeper sympathies must count for something in her work. Still it is maintained that the so-called "general-culture" courses have no place in the normal-school curriculum unless they result in better teachers and better teaching, using this term to include all the work and influence of the teacher.

It seems superfluous to state that the general doctrines of instruction and management taught in the department of pedagogy should be accurately represented in the practice school. But there have been normal schools in which theory and practice were wide apart. This divorce is justified as developing an eclectic spirit in the normal student. When the doctors disagree, he must think for himself. It has been claimed, too, that if a consistent system be followed in all departments of the normal school it begets a spirit of narrowness, of cocksureness, incompatible with that humility of spirit that is the prime condition of progress.

It is true enough that a vast region of undiscovered country lies all about us. Still, if we have made no progress in the science of education, there is no place for the normal school. As we are sincere men and women, we must believe that there is a body of established doctrine, rational in theory and sound in practice. It is the mission of the normal school to expound and exemplify this doctrine. It must be done clearly and consistently. It is the right of the young teacher as truly as of the young physician or of the young engineer to come into his professional inheritance unembarrassed by clouds upon the title. It is primarily the function of the department of pedagogy to declare what this general doctrine is. The training department must square its practice with the theory. This unity is best secured where the supervisor of practice is also instructor in general method. In weekly conferences with the critics he can discuss such questions of theory as are not receiving due recognition, and keep them informed in regard to the lines of instruction in the normal classes.

The unity of the normal school demands that the instructors shall know what is going on in the training school, in their own department minutely, in all departments generally. Unless a course of study has been imposed by state authority, the head of the department should plan the training school course in his branch of study. We may presume that no one else about the school is so well qualified. At all events it establishes a definite responsibility for the practice-teaching in that branch. The course as outlined will provide a list of topics in due order of sequence, a catalog of the available illustrative material, and directions as to the special method of particular topics. It will be necessary for the principal of the school to edit and revise the work of the various departments in the interests of co-ordination. He will possibly find it necessary to reduce the time demanded. It is not expected that this course will prove entirely satisfactory. It will need frequent revision in the light of the experience of the training school. In order that critics may follow the curriculum wisely, or suggest needed improvements, they must *know* what it is. The critic teacher must know the work of each department in its general scope, and must know the work thoroly in its application to her grade. She must feel under obligation to further the general plan and spirit of the department, and to contribute from her experience toward the promotion of her work. This co-operation cannot be secured without frequent conferences between instructor and critic. If the critic teacher has been a stranger to the school in which she is at work, she should spend enough time in the class-room of the departments to discover their plan and spirit. The normal instructor has his reciprocal duties. He must explain his plans and methods to the critics and counsel and advise with them in regard to difficulties. He should assist in the supervision of the practice teachers. To this end the programs should be arranged so that each normal instructor shall be free from class duties at the hour when children are reciting in his branch in the training department.

The chief value of the daily visits of the normal instructor to the practice school is in the evidence he gains in regard to the efficiency of his own work. The ordinary written review tests the quality of the instruction as thoroly as it tests the diligence of the pupils. The visits to the practice school serve a like purpose. He can afford great help and inspiration to the practice teachers. He knows best what material is available, the resources of his department in library or apparatus. He can suggest needed study where he finds that defective knowedge of the subject is the chief obstacle to success.

Most of his criticisms upon the teaching had better be made thru the critic teacher, partly to recognize her responsibility, partly to preserve harmony in the criticisms and suggestions that reach the practice teacher.

The normal instructors should occasionally teach classes in the training department. I question whether one can become a really superior normal teacher unless he has taught children. He should serve an apprenticeship in the public school. He must know from personal experience just what the problems of teaching and management are. In all his instruction there must dwell in the background of his consciousness this knowledge of actual school conditions. He must know the practicable and the possible in the schools of this generation. Teachers of the normal school must be men of ideals, who with prophetic vision behold what ought to be and is to be in education. At the same time they must know that heaven is not gained at a single bound. With a clear comprehension of present conditions and tendencies they can intelligently direct the line of advance.

It is equally important that normal instructors do not forget how children are taught. When it is proposed that they teach classes in the training department, a good deal of inertia is revealed. It is not because they are willing to assume the rôle of guideposts that point the way they never travel themselves. Some of this inertia is due to the fear of the instructor that he cannot carry out his own plans. He is conscious of the lack of personal skill, or realizes that in his class-room discussion he has ignored difficulties that he must face in the actual teaching. He is afraid of the personal humiliation that must issue from a poorly taught lesson. Still, I believe nothing in the life of a normal school is more salutary than such participation of the heads of departments in the actual teaching in the training school. A term of ten or twelve weeks once a year will enable the instructor to conduct some needed experiment, to test some promising innovation. He should give also from time to time model-lessons for observation and criticism, illustrating some difficult point.

This will require him to teach the class a week in advance, to grow on easy terms with the children, to discover something of the range of their knowledge, and to lay the proper foundation for the lesson proposed.

In the foregoing discussion there is an attempt to state some reasons for providing in the organization of the normal school for bringing heads of departments into intimate relation with the training department.

Unless the co-operation is hearty and continuous, little good will come; in fact, little can be expected unless the normal instructors are in the mood to demand the privilege of such participation as a necessary condition for developing their own work. The question thus becomes one of the attitude of the normal instructor. This attitude is largely determined by his training, his acquired habits, his point of view. Of late years we have been filling our normal-school faculties with young people of university training and little else. There is not much in the atmosphere of many university class-rooms to emphasize the importance or dignity of the elementary school. There is little in the spirit of practice of the professor to suggest that the growing child, and not the subject-matter, is the center of interest. Young teachers inevitably imitate their own instructors, especially when no special training has intervened to create more general ideas of the teacher's function. We must have the culture of the university and something more.

It is only thru a considerable experience in public-school teaching that the normal instructor is likely to gain an active and intelligent interest in its problems. When men and women of such experience and interests make up our normal-school faculties, we shall not be found discussing the question now before us.

DISCUSSION

A. P. HOLLIS, principal of the training department, State Normal School, Valley City, N. D.—While the foregoing reveals the logic of President Felmley's contentions, it does not show how well or how ill these heads of departments are fitted to participate in practice-school work. If any data could be summoned which would show this vital point, a most desirable side-light would be thrown on the practicability of President Felmley's theses. Some of the points which would be essential to such an inquiry would be:

1. The amount of professional education normal-school professors had had before teaching in the normal school.
2. The age and experience of these teachers of teachers.
3. The professional spirit; the character and views of life which heads of departments exhibit to practice teachers and pupils of the model school.

While catalogs furnish some of these items, they naturally do not furnish others. In fact, the questions just raised were of too personal and confidential a character to be put into public print. I was therefore compelled to resort again to the syllabus method, and sent out a second circular letter to a large number of normal-school presidents, asking for information on these points. The interests of individual members of faculties were safeguarded by the fact that no names were asked for, each teacher reported upon being referred to simply by a number.

As I expected, not every normal-school president replied to questions of this nature, but a sufficient number did so from representative schools to enable me to call your attention to a small but somewhat unusual group of figures. They are compiled from forty typical state normal schools, and relate solely to the qualifications of their teachers. Replies were received from more than fifty normal-school presidents, but some had to be excluded because they were not explicit enough for all the purposes of the tabulation, others because it was found they were not from typical state normal schools. One, for instance, was practically a private school receiving state aid. Some, like Albany, N. Y., and Cedar Falls, Ia., granted a kind of college degree, which would necessarily place their faculties in a different class from those of the typical state normal school preparing teachers for graded schools. Others were so intimately connected with colleges, like the one at the state university of Utah and the one in Rockhill, S. C., that the two faculties could not well be separated.

The forty schools finally selected ranged in size from a small faculty of five to the largest, of twenty-eight, and geographically they ranged from Alabama to Minnesota and from Massachusetts to California; so that I believe they form a thoroly representative group of American state normal schools.

The total number of teachers in these forty state normal schools was 639. Of these, 301 had received a college education. This was about 50 per cent. of the total number of normal-school teachers. But these figures included critic teachers, who are mostly not college graduates, so that, if the heads of departments alone were taken, the proportion of college men on normal-school faculties would certainly reach 60 per cent., and it would be safe to say that three-fifths of the men in normal-school faculties are college men.

It is safe to assume, also, that the 40 per cent. who are not college men are nevertheless exceptionally well prepared for their work, since they were elected over the heads of scores of college men who apply for every vacancy in a normal school. Several normal-school presidents, indeed, went out of their way, as I shall show later, to emphasize the fact that they considered their teachers not holding college degrees of equal value, and some said of greater value, to the school than those holding degrees.

The fact, then, that 60 per cent. of normal-school teachers are college bred, and that the other 40 per cent. fully measure up to them in the estimation of normal-school principals, seems to justify a first conclusion, namely: that in point of academic scholarship normal-school faculties in this country are fully qualified to undertake the comprehensive work outlined for them by President Felmley.

It might be added that forty-five of these three hundred college-bred normal-school teachers were doctors of philosophy.

I am sure I need not remind this body of the surprising change this indicates from the normal-school faculty of but thirty years ago, where the principal of the best of them was not a college graduate, and where college-trained men were avoided—where, in fact, the normal idea was the one emphatic protest against the scholastic and time-honored methods of class-room instruction then prevailing in American colleges.

The next question which the circular suggested was as follows: "Is the pedagogical or professional education of these college men teaching in normal schools as adequate as their scholarship?" In answer to this question, it was found that 185 of the 300 college men, or three-fifths of them, were themselves without any normal-school training. This was a surprise. I thought of what kind of medical schools those would be which allowed 185 college men who had never attended a medical school to get into their faculties to instruct young doctors. No amount of graduate study on Browning or Calculus would atone for such a procedure. Why, then, is it allowable in the professional institutions we call normal schools?

It is occasionally urged that "deep scholarship compensates for the lack of normal-school education." But in that case the speaker denies the necessity of the normal school itself. If the normal school is willing that three-fifths of its college-bred teachers shall themselves have had no normal-school training, why should it insist that a normal-school training is so necessary for other teachers?

Another answer, however, might be given to my question. It might be replied that the colleges now provide the professional courses which formerly could be obtained only in normal schools. Anticipating such an argument, the circular asked what professional study the college degree indicated in lieu of a regular normal-school training. I hoped to get considerable light from the answers to this question, but I was disappointed. The question was misunderstood, and only a few replies indicated clearly any strictly professional work at the respective colleges mentioned.

In a number of instances, however, it was safe to assume that these college-bred teachers in normal schools had taken certain courses of lectures in pedagogy. Some had even performed child-study experiments in laboratories, and had sent out several hundred syllabi into grade schools. If there were time, it would be interesting to inquire how far such college courses in pedagogy can be regarded as the equivalent of a normal-school training. Such an inquiry would involve a comparison, not only of the broad philosophical and historical themes of educational literature, but also of the practice work done in the two kinds of institutions, of the attention given to practical common-school questions, such as courses of study, class-room behavior, absence, tardiness, markings, and reports, with which every teacher of our common schools must be concerned. But such a comparison between college and normal-school professional work is beyond the scope of this discussion.

There remained one other line of preparation which might be made to justify the presence in 40 normal-school faculties of 185 college men without normal-school training. This was the very practical training which comes from a long experience in teaching. But the returns showed that long experience could not always be shown in the absence of a normal-school course. Eleven of these untrained college men did their first piece of teaching when they entered the normal-school faculty. Surely these are not fitted to guide the method and practice work of a normal school in the way laid down by President Felmley.

Twenty college men without normal training had had an experience not to exceed one year before teaching in the normal school.

This lack of professional qualifications was greatly emphasized by the next question asked on the circular. It was with regard to the age of these college men teaching in normal schools. The average age of all the college men was thirty-seven years. The average age of the forty-five Ph.D.'s in this number was forty-one and one-half years. Omitting the presidents of the schools from the list, the average age of the Ph.D.'s falls below forty. Fifty-six of these college men were still in their twenties. One was a youth of twenty-three, without either normal training or a month's experience in teaching. One had secured a Ph.D. at twenty-five, and had had neither normal training nor experience as a teacher before he was summoned to a normal school to teach teachers how to teach. Such cases were exceptional, but it would seem that under the regime urged by President Felmley such exceptions even would be impossible; i. e., it would be simply impossible to permit a youth of twenty-three, who had never studied in a normal school or taught a year in his life, to arrange courses of study for graded schools and supervise methods of teaching in a model school; and according to the logical position of Dr. Felmley, no man who could not do that should have charge of any department in a normal school.

It cannot be denied that the increasing means of American parents and the multiplication of universities in which graduate work is offered have greatly increased the number of comparatively young men who possess higher degrees, and whose scholarship alone would entitle them to do normal-school work. But in the absence of a further professional training and experience, this very superabundance of scholarship is nearly certain to stand in the way of simple normal-school presentations designed to help teachers of grade-school pupils. These admirable theses of Dr. Felmley's make the time peculiarly opportune to consider the prime conditions of their success, namely, the professional qualifications which should logically be required of every normal-school teacher.

The best preparation for men who are to teach in normal schools is foursided. The first side should consist of a normal-school education, the second of a general college education, the third of a graduate course in pedagogy in a university, the fourth of an experience of several years in grade-school work, either as an active teacher or supervisor of such work.

The university course in pedagogy cannot alone be regarded as a substitute for a normal-school training. The real normal school, its problems and instincts, are practically unknown to a university man who has not come up thru one himself. Possibly a long and honorable experience in graded-school work may, in some instances, compensate for the distinctively professional studies, but the man who learns an art simply thru experience has certain well-defined limitations in the presence of the man who has mastered the scientific principles underlying and guiding the experience.

The normal-school teacher who possesses the fourfold preparation outlined above is necessarily a man who has arrived at that maturity of years and of views which will make him, not merely an enthusiastic scholar, but also a wise counsellor and an inspiring example.

President Albert Salisbury, Whitewater, Wis., Normal School, said: There are three factors here involved, viz.: the general doctrine of instruction and management, the special method of each subject, and the practice of the training school. It *is* necessary to bring these into harmony, lest our graduates be left in a state of confusion and uncertainty. But the proposition that the desired unity should be secured by having heads of departments make tne course of study for the training school is the weak point in President Felmley's scheme. We should thus have a race between specialists, with the president of the school acting as umpire over a general "scrap."

President Draper has been credited with the saying that a chief part of the work of the head of an institution consists in keeping specialists sane. Normal schools are not an exception to this rule. Heads of departments magnify their own work; and this is legitimate. But they naturally emphasize the logical or scientific relations of their subject-matter and lose the child out of sight. The more of a biologist, or Latinist, or geographer one becomes the less of a psychologist he becomes.

The critic-teachers are not without scholarship. They, too, must know the subjects as well as know the children. The critic-teachers should not be made "subs" to heads of departments. In my judgment, the proper person to make the course of study for the training school is the supervisor of practice teaching, or principal of the training school, with the advice and assistance of the heads of departments, and subject to the revision of the president. Little real unity will be secured in any other way.

P. M. Magnuson, instructor in history and social science, State Normal School, St. Cloud, Minn.—The center of the normal school is the practice department. The summary of all method is a knowledge of the child and his needs. If the critic-teachers and the superintendent of the practice school know their business, they ought to be the ones best competent to superintend practice. They must surely know the fundamental principles of pedagogy. If they are willing to take anybody else's "say so" as a guide in methods, they are incompetent and should be dismissed. But by all means let the heads of departments keep in touch with the practice school, but as learners and co-workers, not as lords and masters.

J. H. Paul, president of the Latter Day Saints University, Salt Lake City, Utah.—I desire to ask Mr. Hollis a question. Do we understand him to maintain that no teachers be employed in normal schools except those trained in normal schools? Or, will he not rather admit with me that the presence of college men on the faculty—men and women educated in the universities—will be a real source of strength and inspiration to any good normal school? Is it not important that a real biologist shall teach the biology, a mathematician the mathematics, etc., even if these have not received their education in normal schools?

W. W. Walters, principal of the Eliot School, St. Louis, Mo., spoke from the viewpoint of the elementary teacher. Mr. Walters expressed regret that the normal schools should still devote so much time and attention to methodology. He hoped that in the future work of the state normals the nature and growth of the powers of the child would be a far more prominent feature of the work than it has been in the past. He expressed a regret that every mention of child study had been met with smiles of contempt by a representative body of normal-school teachers, and hoped that thoro scientific child study would be recognized as an important part of normal-school work. He expressed the hope that in the near future the best state normal schools would give academic work in English and literature, in history and social science, and in elementary sciences, that would be the full equivalent of the undergraduate work in those studies now done by the state universities; and that the normal-school work in pedagogy and psychology and child study would be the full equivalent in culture value of the higher mathematics and foreign languages generally pursued in the university, so that the graduates of the state normal school might not only be well equipped for the position of teacher in the elementary school and high school, but that their scholarship and culture might everywhere be recognized as the full equivalent for the scholarship and culture of one holding a bachelor's degree from a state university.

PRESIDENT J. N. WILKINSON, State Normal School, Emporia, Kan.—It seems to me that this is a very auspicious occasion. We are getting ourselves together on this subject. A normal president, a training teacher, and the head of one of the other departments have thus far been heard from. The president evidently finds the training department the best field for the correlation of all departments.

There are heads of departments who forget that their work is to be adapted to training for teaching. The teachers of academic subjects are likely to desire above everything else the gaining of recognition for their students in the colleges and the universities. Such teachers spend their time seeking and training prodigies who are not likely to teach, and forget that the normal school exists for the purpose of increasing the teaching strength of all its students.

There will always be trouble between the training department and the other departments, but it may be a friction that not only produces light, but produces the very heat we need to weld all the parts into a working whole.

MISS MAY H. PRENTICE, instructor in the City Normal School, Cleveland, O.—This has been a most interesting discussion. At least one speaker, I am glad to note, has spoken emphatically of the value of the critic-teacher in council with the heads of departments. Criticism from below brings as much gain as that from above. Primary pupils, student-teachers, critic-teachers, heads of departments, grow best when allowed to express themselves and not required to try to express someone else

Harmony between the practice and theory departments is essential, but it should be the truth presented that secures allegiance, and not the rank of him who presents it.

The plan so well advocated by President Felmley, of actual teaching in the practice schools by heads of departments, will do much to secure this harmony. The head of a department need fear no unkind nor oversevere criticism on the part of the critic-teacher it he meets her on the plane of equality. She knows the difficulties of the task too well for that. If he can demonstrate the value of his theories in actual work, there has been great gain to all; and if he proves them to have been poorly based, there has nevertheless been great gain; and if he is sincere and has courage, the gain to himself has been greatest of all.

PRESIDENT JOHN R. KIRK, Kirksville, Mo., said: We should receive criticism without flinching. Dr. Butler's objections to so much methodology are well founded. I have lived largely in and near normal schools, and have visited them in all parts of the country. They deal too extensively in devices, prescriptions, and recipes — too much in models. The training school is not the chief center of interest; it is only one of the centers of interest. Mr. Felmley's theses involve too much mechanism. They destroy freedom. Mr. Hollis indulges in caveling. There need be no quarrel with the college men. The normal schools are content with too low a standard of scholarship. I prefer a normal-school professor whose scholarship, breadth, and personality equal that of the university professor, so that the normal-school graduate may feel and know that he has knowledge and inspiration from the highest possible sources. The mechanism of Mr. Felmley's plan is driving the stalwart young men out of our schools. Many of the state normal schools by an approach to this plan have become almost exclusively girls' schools. The girls, by our customs, submit more patiently to conventionalities, while the young men prefer, and will have, the sort of instruction that allows greater freedom and does not destroy the power and habit of initiative.

DEFECTS IN THE NORMAL SCHOOLS THAT ARE RESPONSIBLE FOR THE OPPOSITION AND CRITICISM URGED AGAINST THEM IN MANY PARTS OF THE UNITED STATES

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Normal schools as organized and maintained in the United States are a part of the public-school system of the several states, and are therefore subject to the peculiar laws and the special demands of their state environments. They are also so recent in their founding and so incomplete in their development that they are more or less in the experimental stage, and hence there are almost as many kinds of normal schools as there are individual institutions. It has been but sixty-three years since the first state normal school began its work, and the time has not yet been sufficient to enable this great modern movement to adjust itself to the educational system as a whole and to its special field in particular, so as to define the exact province of such a school except in general terms. These sixty-three years of educational history have been notable for the criticism and opposition that the normal schools have continually suffered.

Possibly no other educational movement in modern times has been met with more positive ridicule or more organized contempt, and hence positive progress has been much delayed and complete development of type has been greatly retarded. It has in fact been more a question what the normal schools have been allowed to do, rather than a question what they ought to do or could do. This opposition has come (1) from the influential ranks of the leaders in higher education, because the promoters of higher education have always considered it as the best and almost the sole agency for bettering the public elementary and high school. In advocating their ideas they have frankly and decidedly repudiated the normal schools, because they offered short and simple courses of study as a preparation for an educational career, and thus were in apparent opposition to the traditions and the theories of the historic system of higher education. They also discouraged the normal-school graduate from taking additional college and university education, by refusing to consider his normal-school education and training as having any equivalent value whatever when it came to be applied to the courses offered by these higher schools. In addition, the graduates of normal schools, as representatives of their new system of thought and training, found themselves treated as innovators, reformers, and smatterers by an unfriendly supervision which adhered strictly and firmly to the older and more accepted system represented by the college and the university. Hence there was great difficulty to get a chance to exemplify the training of the normal school in a practical way, as the opportunity to get a fair test and a proper hearing was extremely difficult to secure. This opposition has also come (2) from practical men of affairs, who judge public policies and plans by immediate results, and who ridiculed the pretensions and the efforts of the normal schools as specially extravagant, impractical, and illusionary. They decided also that the doctrines and theories of education as taught and exemplified by the normal schools were more or less a farce or a fiction, possessing in reality no intrinsic merit, and giving finally no promise at all of permanent and worthy results. As a consequence of these controversies and contentions, the normal schools have been compelled to strictly differentiate their field of labor from the college and the university, and also from the elementary and high school, in order to be able to successfully defend themselves from the charge of being simply duplicates, and poor ones at that, or as inferior substitutes for other education already provided by the states. They have, therefore, been more or less classed among the inferior and the unnecessary as educational efforts, and have been treated by many influential educational and political leaders as unworthy and impractical. Such untoward conditions have naturally made the preliminaries slow to formulate, and have likewise made the development and the progress uncertain, doubtful, and hazardous. But despite all these things and the consequent poor chance to exert a salutary influence for the betterment of public education, yet in the past half century no other educational movement of any kind has wielded such an effective influence, nor has any other attained more permanent or satisfactory results.

The normal schools in America have enjoyed much popular favor among the common people, and the growth of the demand for special training of teachers has been so decided as a force in civilization that nearly all the prominent and growing colleges and universities have found it necessary to keep pace with the times by establishing departments for the special study of the educational problems and methods in elementary schools, in order that they may successfully take part in the progress that was observed on every hand. Such an acceptance was a positive and a complimentary indorsement of the principles and the aims of normal schools in general, and was undertaken as a means of self-protection and for self-interest by these great higher institutions of learning, more than because they were much in sympathy or greatly pleased with the conception of a teacher's professional education. The expansion in the number and in the prominence of the normal schools has been very rapid as a matter of fact, and it has meant new power and new distinction for their promoters, while the constant attempt to limit their province, restrict their service, and hinder their representatives in the field has been ineffectual as their development has been continuous and permanent. Their work has been complimented and accepted by the people at large, while the efficiency of their graduates has changed the whole face of the public service in public schools from amateurism to professionalism. The contributions of the normal schools to modern psychology, pedagogy, and philosophy have not been small or worthless. What they have done has been definite, far-reaching, and practical in results, having great effect upon all grades of schools, from the first grade of the elementary school to the last year in the university. While the direct influences have been specially marked, the indirect influences have been greater still, as the scholars and investigators in the universities have been more and more ready as time passed to accept, absorb, and utilize any new and promising developments found in these schools, organize the facts into a logical body of truth, and put them forth to meet and serve the exigencies of modern thought and progress.

So much for the work accomplished by the normal schools during the past half century, a time of small beginnings and permanent organization. It is a proud and notable record indeed, such as history can never overlook nor underestimate, as it continually represents progress, reform, and accomplishment. The thoughtful person might even easily conclude that this mission has been sufficient and this service has been so great that the present can well afford to be satisfied and let well enough alone for the future, as it seems doubtful whether further consideration could develop anything that would be stronger, more serviceable, or more practical. But those who are aggressively at the front in this great work of training teachers for public schools cannot thus be satisfied with present attainments, as they must still recognize that there are defects to be corrected and better plans to be formulated. The criticism and the opposition that these schools yet receive are not products of fancy nor prejudice. Some of them must be accepted as well taken and needing reform and construction. The destinies of teacher, education, and training are in the hands of a class of men and women who are specially noted for genuine willingness to investigate the truth, and they are also ever ready to meet the objections and make progress. With such a laudable purpose as here stated, the chief defects that are thought by the writer to be most prominent and largest in the public policies of normal schools as organized, maintained, and managed in this country are stated, in the belief that they are such defects that time and effort and common-sense can easily overcome them, and that they are at this time the principal hindrances to a better progress in and a better service by these already great and prominent public educational institutions.

1. Normal schools have not made and do not now make enough of scholarship and intellectual culture to satisfy the growing demand of the strongest, the best, and the most promising students who personally look forward to education as a career. The fact is that the preparation obtainable at normal schools is in many respects not sufficient for as large a field of usefulness and service as the executive ability and personality of these persons make possible. The narrowing of the preparation must

have the effect of dooming their graduates to smaller and more petty fields of labor than is either desirable or necessary. The normal schools must therefore meet the demand and offer such inducements for scholarship and culture as the most promising and keenest intellects need in order to guarantee to them a career where talent and strength can be used entirely, and where the higher and better possibilities of a vocation are assured, or else they fail to comply with the real requirements of this progressive age.

2. The normal schools have made and still make too much of theory, dogma, and philosophy, and too little of the real, the practical, and the essential. There is no doubt but the criticism of the common man, which says that much of the so-called pedagogy promulgated and taught as the theory and philosophy of education is the merest bosh and nonsense from his practical standpoint of serviceableness, value, or benefit, is not entirely defensible. It is substance, reality, and efficiency that are needed and insisted upon in this great age of progress. It is common-sense and judgment that must be applied to all the problems of life in education, not abstruse thinking or disconnected philosophy or useless theories. The only kind of pedagogy that the American people regard as actually worth the having in these days of results and great accomplishments is a kind that is business in its nature, producing readiness in action and decided efficiency in the work of education. For such results and for such types of activities the real normal school must be an exponent. It cannot refuse its true mission.

3. The normal schools are usually conducted on the "one-man idea," instead of the "faculty idea." These schools are too generally organized on a theory of unity, in which the head of the school is assumed to be so well grounded in wisdom, so perfect in judgment, so large in capability and resource, and so competent to direct that all associates are subordinated to an extravagant extent, requiring them, not to think themselves, but to faithfully carry out the ideas and the notions regarding education that are possessed and enforced by the central authority. There is of course a so-called faculty of teachers, but they are not treated as if they might possess valuable ideas or experience that are worthy of being accepted or put to use. They must not constructively contribute to the upbuilding and management of these schools, as their sole province is that of satellites who shine thru the inspiration and the guidance of the superior. The faculty meeting in such relation is not a place for conference, but a place to receive direction and instruction, a place where the unifying process is amplified and magnified until all difference of opinion and practice is obliterated. Success as a teacher in a normal school, then, begins to mean a peculiarly special ability to work out a president's conception and decision of the true way to successfully teach and train teachers. This system prevents a school from becoming a great public

institution, such as is always possible for a university or a college, and decidedly limits its influence and power in the very field that it endeavors to successfully reach and occupy.

4. The normal schools are generally conducted on the notion that the training department is the only center of all complete and perfect efforts, and that all other lines of work and development carried on by the school must contribute to its prominence and glory. Now, such a conception exaggerates greatly the actual possible service of the training department, and also specially belittles the service that the other departments are qualified to perform in the development and training of a teacher. There are special benefits to be gained from personal contact with all superior teachers in the class-room. Such benefit is just as effective in developing the power of the teacher in training as the training school, because the actual and powerful teaching of a branch of knowledge has a great and direct influence as an effective example upon a would-be teacher. If the students getting ready for a teacher's career got nothing from a normal school except professional instruction and technical training, it is quite certain that the majority of them would mentally perish from the monotony of the effort, and would find it necessary to decline to continue such unpalatable work. A true student comes to a school to get into contact with great personalities in the teachers and great ideas in the subjects taught, more than to obtain technical instruction or special methods of teaching and managing. The greatest thing about all schools is their spirit and the superiority of their environment over the ordinary experience of the student, and it is folly to expect a right preparation for any career without the benefits of a mental diet that is agreeable, attractive, and wholesome. To confine a growing life to the technical and the professional alone, to the extent that it is frequently practiced, is contrary to science and also to common-sense.

5. The normal schools are commonly conducted, maintained, and supported on a cheap plan. They are treated as if they were to be small and insignificant schools, very meagerly equipped, cheaply directed, and taught by persons of narrow experience and education. The theory of their management seems to be that they need less apparatus, less libraries, less laboratories, and less specialization in their instruction than would ordinarily be expected of colleges and universities. This fact is assumed as correct and true by the people of a commonwealth, by the legislatures, who decide destinies in public affairs by making laws, and also by the boards of trustees and faculties selected to manage and develop these schools. The preparation of a public-school teacher is thus assumed to be a very easy and simple work, and the expense is therefore inferred to be very small indeed. To secure a good patronage of students under these uninviting circumstances, tuition is made free, and special efforts are put forth to gather in "from the highways and the hedges" large num-

bers of those who are supposed not to be qualified for much of a career, thinking that possibly they can in some way be induced to be elementary teachers for the common school, such teachers as can eke out an existence at the small salaries generally paid for this work. This condition is unfortunate and unfavorable. It certainly requires decided native ability, in addition to training, to make a teacher. The right kind of normal schools can therefore never be cheaply conducted schools, as they must have the most elaborate equipment, the largest working libraries, the most perfect facilities, the most distinguished and original teachers, if they are to be fully able to meet the exigencies placed upon them in solving educational problems.

6. The normal schools are, as a rule, weak in the *personnel* of their faculties. This is due to many reasons, but chiefly to the economic conditions that are required by the small salaries paid and by the unfavorable conditions imposed, when compared with other higher lines of teaching. Teachers in normal schools are commonly selected because they possess a peculiar kind of skill, even if they lack special personality, marked scholarship, or other decided attainments or experience. These conditions have improved somewhat in the past ten years, but nevertheless there is still so much room for positive improvement in these respects that it should never be forgotten that even normal schools depend entirely for their prestige, for their greatness, and for their usefulness upon the character, the efficiency, and the greatness of the individual members in their faculties. Some things are useful and important, others are imperative and desirable, but a faculty is the one factor of the school whose superiority, excellence, and greatness are always an absolute necessity, whatever else may have been provided or planned.

Normal schools are, and of a right ought to be, great public institutions, because they have such a great province and are rightly expected to perform a great public service in a great way. The unusualness of these problems demands that normal schools be conducted on large plans, that they claim their right to the things that civilization stands ready to give when the demand is rightly understood, and that they thus possess their heritage and have the facilities that are commensurate to their needs. With this outlook there will soon be the advent of a new era, and the next decade will see magnificent public institutions of the highest and best type substituted for what are today commonly denominated as very ordinary schools.

DISCUSSION

L. Seeley, professor of pedagogy, State Normal School, Trenton, N. J.—The statement of this rather long title seems to admit that there is a great deal of opposition and criticism of our normal schools, and that there is justification of the same owing to defects in the normal schools themselves. Now I do not know of any considerable opposition to these institutions. I know that legislatures liberally provide for them, that the number of students in them is rapidly increasing, and that their graduates were never in so great demand. There will always be critics; nor is this an unfortunate circumstance. Just and wise criticism acts as a corrective, and stimulates to better things. Let us examine some of these criticisms of our work, and wherein they are well taken, and strive to benefit by them.

1. LACK OF SCHOLARSHIP OF NORMAL GRADUATES

Perhaps the most vital and most often heard criticism of the normal school is that its product shows too little scholarship. Let us admit that the fundamental necessity in the equipment of the teacher is scholarship. You may secure a "knack" of doing things in the schoolroom whereby there is an apparent temporary success; you may lay stress upon "methods" by which instruction seems to be well imparted; you may acquire skill in manipulating the external evidences of the teacher's work — and I do not depreciate the value of all these — but if there is a lack of scholastic attainment there can be no permanent success. Too many of our normal schools, by the admission of poorly prepared students, by too short a course, by depending upon a veneering process to cover up defects, are sending out teachers ignorant of the subject-matter.

This condition is being slowly corrected, and we have every reason to be encouraged. When we compare our rate of progress with that of other countries, the picture is not altogether dark. Our first normal school was founded in 1839, that of France in 1684 and that of Germany in 1697. Thus these two countries have a century and a half the start of us, and yet a comparison of the work of our best normal schools with that of the elementary normal schools of France and the teachers' seminary of Germany would show a result of which we do not need to be ashamed. The trouble is the difference between our best and our average normal school is very great, and we are comparing our best with their average. Our early normal schools were mere academic institutions, and, without materially lengthening their course, we have added the recently demanded professional training, thus weakening the academic work. The obvious remedy is a higher standard of admission, or a lengthening of the course, or both. That higher standards of admission are now possible is shown by Dr. Harris' latest report. The increase in students in our secondary schools from 1890 to 1900 was 95.98 per cent., while the increase in the number of secondary schools for the same period was 138 per cent. Commissioner Harris very hopefully says:

> The increase in the number of high schools and in the number of students enrolled in them is something phenomenal. It would seem as if the people of all cities and villages had determined to provide high-school accommodations for their children. More than this, there is now a movement to furnish accommodations for all qualified children in county high schools where the population is too sparse and the wealth too small to provide town high schools.[1]

When the standard of admission is fixed at the completion of a full high-school course, as has already been reached in some parts of the land, this defect should disappear, and to remove this is the first and imperative duty of our normal schools.

2. LACK OF CLOSE RELATIONSHIP WITH THE SCHOOLS FOR WHICH THEY PREPARE TEACHERS

Our normal schools take too little account of the schools for which they prepare teachers. Of course we cannot expect to come as close to our clientage as the German and French normal schools do, where each normal school supplies teachers for a limited territory; but we might study our mutual interests far better than we do. How often trustees employ local teachers with but little fitness in preference to normal graduates, even on the same terms! Prejudice may be a factor, but why should there be prejudice? The truth is we fail to prepare our graduates to meet peculiar local conditions, and the trustee will have none of them. He thinks that they are full of new-fangled notions, curious methods, and high-spun theories; but he could stand these things if the teacher had been trained to a sympathetic comprehension of the needs of his community, as the German country schoolmaster is. The normal school must be the leader, the pioneer of educational thought and practice; but it must not go too fast, else it will prejudice the community and defeat its purpose. This is no old-fogyism; it is common-sense.

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[1] Report of Commissioner of Education, 1899–1900, p. liv.

Our American people are progressive in education as well as in everything else; but they have been suspicious of the normal school because of its lack of close touch with the common school.

I am warned that I have exhausted the space allowed me, and can only state a third effect, without discussing it.

3. LACK OF CIRCUMSCRIBED AIM

The high school prepares for college or for life. The college aims to fit for broader citizenship and lays the foundations for a professional career. The university specializes along different lines, seeking to give definite mastery of some particular field of human thought and human endeavor. Modern civilization is so complex, the division of labor so great, and the requirements of each calling so multifarious that no one can be expected to master other callings than his own.

The normal school is intended to prepare teachers, but there are many kinds of teachers, and the aim is not definite enough. The normal school attempts to make kindergartners, primary, grammar and high school teachers, assistants and principals, grade teachers and district-school teachers under the same course of study, in the same time, with the same instruction, in the same classes.

Has not the time come when there must be a greater differentiation in the work of our normal schools?

This work has already begun by the establishment of chairs of pedagogy in colleges, by the founding of teachers' and normal colleges, and by organizing classes for kindergartners in some schools. But this does not reach the great mass of our common-school teachers, who also must in some way receive special training for special work. This will necessitate a reconstruction of our normal-school scheme, whereby there may be at least two grades of normal schools, somewhat after the pattern of France.

President Albert Salisbury, State Normal School, Whitewater, Wis.—The state normal schools are set for a specific, practical service, to serve their states. The state expects the normal school to take the young people where it finds them, and to hold them as long as it can, and give them all it can. More than this it cannot do. It must give them scholarship, all they will stay for, and first of all in those subjects which they will be called upon to teach. But this is not all that it should give them.

About a generation ago a bogey was invented and set in motion, the bugaboo of *methods*, "cut-and-dried methods." This bugaboo is now old and second-hand, but seems to have alighted in Dr. Butler's hat. We have been told here today that we should present a few fundamental principles, and then method will take care of itself. But is this true?

I understand method to be systematic procedure according to principles. It is the *application* of principles. Are young people able to make this application wholly for themselves? Principles are abstractions; they must be reduced to the concrete. We do this by our work in special methods and by the work of the practice school. Can we do it in any other way? What more consistent or logical or profitable thing can the normal school do?

President John W. Cook, Northern Illinois State Normal School, De Kalb, Ill.—I am reminded of a remark which President Lincoln once made when beginning an argument in a lawsuit in reply to the eminent Judge Logan, of Springfield, Ill. It was to the effect that he had so profound an admiration for the intelligence and legal knowledge of Judge Logan that whenever he found himself unable to accept the opinion of that distinguished attorney he felt somewhat skeptical as to the conclusions of his own judgment, and he could only console himself in the thought that possibly even Judge Logan might make a mistake. I have always listened with interest to anything that Dr. Seerley has had to present, but I am obliged to confess that I cannot adopt his view in this particular instance. And the discussions that have followed have been still less satisfactory. Indeed I have rarely attended the meetings of any of the sections of the National Association in which the work of the institutions for which the section stands has been so unhappily discredited. A stranger who should have dropped into our midst might conclude that he had strayed into a meeting whose central idea was to attack normal schools, rather than to elucidate their methods of work. The references to the Superior Normal School of Paris are interesting and suggestive. But to hold that the American state normal school at its present stage of development has any such function or should attempt any such problems is to make a grave mistake. France is generously equipped with provincial normal schools, and it is to them rather than to the unique institution in Paris that she must look for the preparation of teachers for her elementary schools. Teaching, indeed, cannot be said to have attained the rank of a profession as yet in this country. In no one of the states of the Union has there been any such development of the idea of professional instruction for teachers as to secure well-equipped and thoroly competent schoolmasters for all of the schools. Massachusetts has one good normal school for each thousand of her teachers, but such distressing mortality prevails in this particular department of human activity that even her admirable facilities are inadequate. In no state west of the Alleghanies is it possible, with the facilities at present operative, to furnish an adequate supply of teachers for public schools. Our ambition consequently must be far less lofty than that of the gentleman from Missouri. I am disposed to think that a longer experience in the work which he has undertaken will satisfy him that humbler achievement will do far more for the commonwealth by which he is employed than any Quixotic scheme shaping normal schools after the model of the institution to which he has referred.

I have heard ever since I can remember a good deal of talk about normal-school methods. The impression seems to have prevailed that these institutions were engaged in the manufacture of formal devices with which their pupils were to be stuffed and which were to be retailed regardless of their application in the schools that should unhappily come under their influence. I have not before, however, heard the sentiment expressed by normal-school men. The remarks have also been so utterly inapplicable to the institutions with which I have been acquainted that I have attributed them to the ignorance of their authors. Am I mistaken in my impression that there is a disposition on the part of normal-school men to return to the academic work of the old normal school? Is it because there has been an attempt to construct professional courses and that such an attempt has been unsatisfactory because of the lack of development of pedagogical principles and practices? I sincerely trust that I am in error in this matter, and that the normal school will not abandon the fields of professional investigation and development because the problem of education is found to be difficult. That would indeed be an ignoble surrender. I have no such conception of method as I find coming so trippingly from the tongues of many speakers. The term has a deeper and profounder significance to my mind, and I should rather include under the word "devices" all of that formal machinery which has been so justly condemned in the past. Method is indeed a subject that is worthy of the profoundest investigation, and it is indeed to this deeper and more vital method that the normal school must devote the larger part of its energy. Let the academy exploit the knowledges on their own account, but let the normal school separate itself more and more widely from those institutions whose function is the diffusion of knowledge, and not the technical preparation of men and women for the practice of a distinct and fairly well-defined art.

PRESIDENT HOMER H. SEERLEY (in closing the discussion)—I hardly think it best to prolong this discussion, altho I desire to express my appreciation of the courtesy extended. I had purposed to not make any reply to criticism upon the paper I previously read, because I have no doubt of its shortcomings. However, I am glad to express my pleasure at the unbounded optimism of my friend President Cook. He is remarkable in being able to be optimistic in whatever condition he finds himself officially. "Whatever is is best" is a good motto for all of us to have who are workers for the American people. We do what we can much more than what we would. Each has his environment of statutes and customs to more or less regulate his work, and no state normal school in the Union is able to decline to accept the conditions and limitations thus imposed. President Cook is optimistic regarding the normal-school plans of Illinois, and I am just as optimistic regarding the plans of Iowa. We certainly cannot, therefore, agree; neither do we need to do so nor care to do so, as we can respect the efforts of each other despite these differences of opinion.

I think the state normal school ought to be a training school in which all kinds of teachers needed by all grades of public schools can be prepared. I believe in the training of teachers for primary and elementary grades, and Iowa is busily doing this very thing. It is certainly the function of the normal school to do such work, but that cannot be its sole function, as there is no reason that is worthy of the name that excludes a normal school from training all kinds of special teachers and all varieties of high-school teachers if the state sees fit to properly support and equip such departments as are necessary. The college and the university have no particular right to claim those higher lines of public-school work by virtue of their individual ownership. The right kind of a normal school can even make a better preparation for teachers of Latin, science, history, and other subjects in secondary schools, if scholarship is recognized as a part of the lawful work of the normal school, than can now be secured in any college or university as at present managed, as the training in teaching and the professional instruction possible have much to do in the development of the power and the spirit of the teacher.

My claim is, therefore, that the normal school can be a greater and more useful school for the state than most of those who have spoken have thought; and furthermore, that it is the business of the normal school to occupy these neglected fields, as the states stand ready to give the buildings, the equipment, and the teachers to meet this larger service, if we but feel ourselves to be capable for the larger task. What the American people need to know is that these larger things are possible, and that we are ready to be their servants in every way that we can help the public schools. The normal schools need to put themselves upon such a basis that they are entitled to the respect and esteem of the public as being equivalent in utility and possibility to the best educational institutions in the land. That the people are more than ready to permit such expansion and development so as to make them great institutions is a fact. I have had such experience as to justify me in saying to you all: Come upon the platform of a greater service and demand such public support as will guarantee the most satisfactory success.

DEPARTMENT OF MANUAL TRAINING

SECRETARY'S MINUTES

FIRST SESSION.—Wednesday, July 9, 1902

The Department met in the chapel of the Minnesota State University at 9:30 o'clock A. M., and was called to order by President Charles R. Richards, of the Teachers College, Columbia University, New York city.

After a vocal solo by Mrs. L. M. Park, Professor Arthur W. Richards, of the Ethical Culture Schools of New York city, presented a paper on the subject, "From the Practical to the Intellectual in the Shop."

J. E. Painter, supervisor of manual training, city schools, Minneapolis, Minn., read a paper on "The Field of Shop-Work in the Elementary Schools."

The following named were elected as officers for the ensuing year:

For *President*—C. F. Warner, of Springfield, Mass.
For *Vice-President*—J. E. Painter, of Minneapolis, Minn.
For *Secretary*—A. W. Richards, of New York, N. Y.

The department adjourned to Thursday afternoon, July 10.

SECOND SESSION.—Thursday, July 10

The Department met in the University chapel in joint session with the Department of Art Education, and was called to order at 2:30 P. M., President Richards in the chair.

Miss Gertrude Louise Hale sang a waltz song, "Nymphs and Fauns," *Bemberg*.

The following papers were presented:

"Possibilities of Art in Relation to Manual Training," by Ernest F. Fenollosa, and "Practical Co-operation between Art and Manual Training," by Harold Peyser, instructor in manual training, public schools, New York city.

Discussion of the papers was opened by W. H. Hatch, superintendent of schools, Oak Park, Ill., who was followed by Homer H. Kingsley, superintendent of schools, Evanston, Ill.

After the discussion the joint session adjourned.

THIRD SESSION.—Friday, July 11

A round-table conference was held at 2:30 P. M., in the University chapel, to discuss the topic, "The Relation of Household Economics to Science in the High School."

Miss Lillie Collamore Smith, of the Brookline (Mass.) High School, presided at the conference and introduced the subjects for discussion.

The question of the relative value of cooking and other forms of hand work as compared with instruction in applied science was first taken up. The weight of opinion expressed was that actual constructive work with the hands is the natural road to the interests of high-school pupils, and represents the essential feature in any real development of knowledge and capacity in the field of household economics.

The conference then discussed the correlation of instruction in household economics with that in pure science. Many points of view were expressed, but the current of opinion was clearly toward denying the importance of a close correlation between instruction in the two subjects. The conference closed by adopting the following resolution:

Resolved, That in the opinion of this conference intimate correlation between instruction in household economics, especially in its early stages, and the teaching of pure science is not essential, and that a scheme of instruction in household economics can be most effectively arranged on the basis of its own subject-matter.

CHARLES R. RICHARDS,
Acting Secretary.

PAPERS AND DISCUSSIONS

FROM THE PRACTICAL TO THE INTELLECTUAL IN THE SHOP

ARTHUR W. RICHARDS, ETHICAL CULTURE SCHOOLS, NEW YORK, N. Y.

Let us think of the title of this paper as indicating a movement, not a goal, and as a larger world-movement not less than one of possible or desirable bearing upon the question of hand work in the school.

Looking about upon the activities of life, even as a citizen, does it not appear that progress in their conduct from religion and philosophy to the arts and industries is ever toward a greater intelligence concerning the processes and laws involved? And altho the outcome in present world affairs may seem chaotic and unsatisfactory, these have nevertheless a very natural and lawful descent from a past which with much fitness we may take seriously.

In the fabric of life it is with the weft thread cast by Bacon and the pattern then begun and yet in process which the present day has to do—the warp and woof of science, which has shown the outlines of an orderly world and the presence of an intelligence with which man feels some kin.

In no department of human affairs has this thread woven to greater effect than in the arts and industries of life, and the social and educational purport to man is not at all a clear and settled matter. It is, however, becoming plain that the whole fabric of life is affected, and that some adjustment is demanded of its beneficent institutions, even its schools.

Of the handwork of man especially is some adjustment of the vision now and then necessary if it is to be contemplated with due perspective.

The moderate and crude rule-of-thumb methods of the crafts and trades of old; the contentment of a son with the craft of his father; the simple, home-made paraphernalia of life, with its homely and human touch; and, finally, the leisurely day necessary to give this lingering touch—are fast dropping from the ways of life. Regret for this the author shares with many, yet the world ever moves on, and no artificial resurrection of the arts and crafts of old will stay those real movements which are organic.

But the time is at hand when the arts and crafts of old, picturesque and human as was the art they gendered, do not represent or cover by a long way, either as to motive or matter, those constructive activities of man which are expressed thru the work of his hands.

Little wonder that the age of crafts and primitive forms of industry and the present age of steam and electricity show not immediately marked common factors. Man is, however, very much the man he was — "a tool-using animal." Because his tools have become infinite and complex, and the forces subject to his intelligence surpass the highest flights of the imagination of his earlier day, shall we say, therefore, as we may no longer hail him as craftsman, that he is a less worthy kind?

This matter of values in differences of kind bothers us sometimes to balance, so often is it more of one than another kind with which we have dwelt. It was under such stress, in fact, that the several forms of hand work entered the school — thru the familar kinds, not thru philosophic considerations, from the technical school on the one hand and the kindergarten on the other, with an intermediary movement springing from and devoted to the home and household interests.

This latter movement there is some reason to think will move on under the pressure of the art and æsthetic interests into the arts and crafts point of view. If so, again will manual training fail, as it has in the past failed, to adequately represent in the school the workshop of the world as a social and civilizing factor in the life of man; for, failing to represent the workshop of *industry* and *science*, it fails to represent also many important human and world interests, and omits material of too great educational value.

This material which has come into the workshop of the world thru the impulse of science, discovery, and invention is, it is believed, of special significance to the child of the elementary school age, considering the needs of motive, intellect, and imagination.

From the workshops of industry and science come those servants and tools of man which are the attractive features of the world of action which he sees about him, the factors which give it "go," ever challenging his curiosity and understanding. But is this not just the appeal we would expect of these things to him who is in nature something of the man concerned with making the mysterious in nature subject to his intelligence?

More than this, is not the dominant impulse of the elementary school age an impulse to acquire a larger grasp of and intelligence about man's world and its activities? And tho we may leave by the wayside multitudes of ordinary impulses, are there not some large and dominating impulses which we would hardly be justified in not considering, so much do they seem to indicate something of "the nature of the living principle within" with which Plato would have us start, and so much is it necessary to consider them if we would "order their lives for the best", as is his injunction?

The question, then, of what material offers the most fitting food for these larger impulses is one of some importance, and it is purposed to consider here that material which science and invention have given to the workshop of the world in its significance to the needs of the elementary school, and in the several aspects — first, as concerns the nature of the motives which it lends to the work; second, as concerns the intelligence which it lends to the activities; and, third, as concerns the qualities it lends to the imagination.

Considering the motives which may be associated with our handwork, the question is, what desires, what ends, shall we consider of most worth as the conscious impelling and directing agents of the activities, when valued according to the social, ethical, and intellectual life and purpose to which they lead? Have those superior worth in this direction which constantly seek the æsthetic, the beautiful, the emotional, or must this place be given to those which seek delight in the rational, the philosophic, the perception of purpose, law, and order in creation? Or shall the honors be divided between these two types?

Or, further, are these but exterior aspects of the same more fundamental thing, the human quality and import of which, if acquired thru either exterior form have much the same culture value? Knowledge for knowledge's sake is quite as sane and useful a proposition as "Art for art's sake," both art and knowledge in themselves being quite on equal terms until to humankind a difference in value and import is manifest. If we come to their subjective co-ordinates and consider knowledge, not in itself, but as leading to intelligence, exaltation, and inspiration thru a comprehension of something of the majesty of truth and order in creation, then it is hard to escape the feeling that we are on the borderland of the æsthetic, and if forbidden the word according to present-day usage, it is mainly because at present the field of the æsthetic has not its final and fixed limits.

However, it is not of much concern here as to whether they are or are not in the final analysis the same in kind or are covered by the same term, for it is desired but to present them here in opposition to indicate, as bearing upon the matter in hand, that there are motives which, thru other form and manner than that commonly assumed by those of the æsthetic, are to human-kind of much the same purport as to the social, intellectual, and culture values involved.

Of such bearing are those motives and aspirations which have kindled the imagination of and stirred to absorbing labor the man of science, discovery, and invention; and the results of these, if measured either in terms of the type of individual produced or in terms of the quality of life given to mankind, as indicated by the freedom and aspirations and the altruistic works made possible, constitute perhaps the grandest record of history.

It is but an ordinary observation that not always are those of superior moral and ethical force who are constantly occupied with the fine arts. The difficulty which this brings into the school, as already suggested, is in this matter of perceiving fairly the value in differences of kind. "Our day has its idols", and institutions still have much ancestral material in their garrets. So it is that the æsthetic is still limited to its old forms, and not as a practical working conception is it generally recognized that he of scientific and inventive impulse may "have an æsthetic aim alluring him by a beauty" peculiarly its own.

Exterior form as a pleasing effect may be the end held before the mind in our constructive work. Now if this end be given first place in the mind as the motive of our handwork, it leads most naturally to such work being selected as allows of the maximum freedom in exterior form, and in which the functional and mechanical determine only to a minimum what the form shall be. Very readily, then, does a preponderance of conscious attention come to be given to this matter of appearance, with which, I submit, both the social and the school atmosphere are already sufficiently charged.

Let there be no mistaking what is meant here. It is effect in appearance as the conscious and all-important end in the child-mind which is considered as dangerous and corrupting, and not appearance, which is a result and natural attribute of that which is admirable because constitutionally sound and adequate.

The objection, therefore, is to giving a minor attribute the major place in the child mind; to starting at the wrong end.

And so it is held that the manual work of the elementary school, to a large extent, may well be given over to a type of work the forms of which to a maximum degree call for the consideration of the functional and mechanical content, and precisely for the purpose and advantage of placing the preponderance of attention on the content rather than the form—giving the major attribute the major place; starting at the right end.

Nothing depreciating the value of the æsthetic as a force in the world of action or in education is intended here, but that this value comes only thru the influence of the fine arts is held as a reasonable doubt and considered inadequate as a conception for the educator; for it is reasonably possible that like culture values do not depend upon like forms, especially if in this connection anything be conceded individuality in its various modes of establishing its human and world relations.

To hold to what this specific point leads, however, is not necessary to the purpose of this paper; but concerning the main question of individuality, for which it may not seem adequate provision is here made either as to matter or method, let somebody be presented to allay unnecessary misgivings and lend point and perspective to the position, so far as it is intended to involve this question of individuality.

Briefly, individuality is considered as having little or no motive or interest apart from real things and affairs of the world of man. In these things, in fact, it finds itself sufficiently reflected; that it is from without the self that interests and motives are built up; that in the same object or matter groups, or even multitudes, may acquire and have equally intense and personal interests. And that becoming a personal interest or motive not at all is it more or less personal because the same to others, or on account of the source or occasion of its origin. Whether it be derived from or suggested by person or thing, accident or purpose, friend or relative, home or school, matters but little; for as an interest and motive it thrives more upon its inherent attributes than upon the occasion of its conception.

From this point of view, therefore, it was difficult to understand why the boy who was making an ironing-board, the motive for which was acquired at home, was necessarily working with greater individual interest and motive than he who was equally absorbed in making a bridge, the motive for which came from the interest of the shop. And neither was it clear why it was an obvious conclusion that because the whole class may be dealing with the same thing there is necessarily, therefore, less individual motive, activity, or satisfaction. It would seem that those holding such a view are more interested that the individuality of pupils receive *free play* than that it receive the *freedom* gained *by work* associated with matters of large human concern, with which all inspiration and motive, however individual, must be concerned. It was not so difficult, however, to see why one boy at any given time may not have a bit of motive in making a paper-knife or ironing-board, while his neighbor may have considerable; for with particular objects having very narrow world-relations and very little content of a nature to quicken the intellect and imagination have we not very much a common experience? And so long as we deal with the matter on the basis of objects alone, especially of the kind mentioned, that long does the question of individuality promise to present itself as requiring for its satisfaction particular things. On the other hand, can we but get beneath the things to the general attributes and principles of their being, experience shows the author that with these the question of a common kinship assumes an entirely different aspect.

In connection with the two aspects of the question of motives, it is felt that the thoughts presented bear with special potency upon the latter half of the elementary school age; for at this age especially is there an awakening of the intelligence to a greater reality of things, and during this period are formed, thru a more conscious reconstruction of the old and a construction of the new mental material, the more positive and final motives, purposes, and ideas that are to carry over into adult life and purpose. The environment, suddenly enlarged by the freedom gained from the nurse and nursery, presents on every hand forms which are but signs of a more significant and enticing content, giving continual challenge to this awakened intelligence.

The transition, then, from the form to the content of material as the basis of selection, is a move of some consequence, if we are to face the question of food for the activities of this period.

And I would present here as very little exploited to this purpose the workshop of the world in its larger meaning, as transformed and enriched both in matter and method by the contributions from science, discovery, and invention. Not less is it practical, accurate, and effective in small matters and methods, but more is the intellectual demanded in dealing with the larger laws and forces with which the constructive work of man has become associated.

The bearing of this material upon motive and inspiration to labor has been indicated somewhat. Its bearing as concerns the intelligence which it lends to activity is equally important.

This it is hoped will appear when considering the question of method from concrete examples, for it has to do both with matter and method, and space allows of but one point being considered here.

This point is that a large view and grasp of the matter, a full intelligence upon the part of the pupil, is necessary if anything valuable as to means and method are to be conceived and given birth. As manual training, no means or method, tool or practice, just because representing good usage in a trade or craft, is so important or valuable as that means or method conceived as fitting from the fullness of the worker's intelligence. Again, the plea is to give the major place to the major consideration, that the minor may be given its just and real bearing and import to the whole. And I would suggest the significance of this to the practical problem of treating large classes by raising the question as to whether forty workers, with an intelligent and broad view of the matter, or forty who have in mind but the immediate bearing of that move with which they are at any time occupied, make the greater problem. Does not the answer to this indicate that the first concern is the matter of intelligence about the problem in hand ?

A third respect in which the workshop of industry and science becomes valuable to our purpose is in respect to the sanity, fertility, and creative power which it lends to imagination.

Here again is there some reason for thinking that the "idols of the day" or the material of institutional garrets are still lingering in the working conceptions of those whom this most concerns.

Is there not some reason for believing that too much relative value is assigned the world of fanciful forms and unreal things, in which all truth, balance, and laws of order and sense, as used seriously in life, are jeopardized as formative material for the imagination of children?

Is it not a common observation that the faculty to put together and conceive in imagination possible relations, forms, and arrangements of real things and forces with a keen, true sense of fitness is a faculty which in children will generally stand improvement, and one which it is at least safe to cultivate? It is, in fact, in just these qualities of imagination that the pupil whom we consider able and worthy excels.

May we not, even yet, well lend ear to Bacon, at least as open to suggestion, as he condemns the practice of "the mind working, not with stuff, but upon itself, producing cobwebs of no substance or profit," and consider in this connection the condition of the child mind, and if it is not often judged as having little imaginative power when but material is lacking? And again when he calls natural philosopy — in which he justly includes the manual arts — the first matter of philosophy, and consider if to the child mind this is not especially potent? And may we not in like manner lend ear to Rousseau, who would have his pupil philosophize as he works, and consider as material for this the relative merits of those matters with which the workshop of the craftsman is concerned and those with which the workshop of industry and science is concerned, having in mind their bearing upon motives, intelligence, and imagination, the mainsprings of action?

Hastening on to the question of method, which after all determines the final character of the activity secured, it is presented thru an example taken from the year's work of the seventh grade, and one which fairly well answers to the thought presented in this paper.

The limitations placed upon this paper, however, allow of the method being presented only in outline.

A *study* of *the* water wheel — not a *model* of *a* water wheel.

1. A historic sketch — concerned with the value and uses of the water wheel to man, past and present; conditions of their use; primitive types of wheels and mills.

2. The physics involved — hydraulics, concerned somewhat with the dynamics of fluids; raising questions concerned with pressure, head, and quantity, explaining the occasion for dams, mill-ponds, reservoirs, etc.

3. The mechanics involved — concerned with the interaction of water and wheel, the three ways which it may act upon a wheel, by gravity, pressure, and impulse; giving three types of wheels to correspond, and classing thereby the several kinds known as "overshot," "undershot," "breast," "turbine," and "jet-wheels," and leading to questions of efficiency as determined by conditions.

4. The problem of design and construction, starting with our city

conditions — a faucet in the sink; what type of wheel promises greatest returns.

The jet-wheel winning its own case — not the teacher; consider size of wheel as bearing upon power and speed, number of spacing of buckets. Leaving questions about the form of buckets and the form, number, and direction of jets, for the imagination to work upon, the wheel may be started as a problem in drawing, mechanical design and construction, and tool work.

Having the wheel, the problem of feeding or applylng the water to it may be taken up by discussion, and with drawing-boards at hand, that, as conceptions are formed, their expression according to the laws of mechanical drawing may be dealt with effectively. The question of size, number, and position of jets being settled, and lined in, the question of connecting and feeding them may be discussed, one boy discussing the propositions of another to the profit of all. Many questions as to thickness and length of material, size of holes, length of shaft, base, and many other matters, may be left for the individual to settle.

Brief and meager as is this outline, it is hoped that several significant things will have appeared:

1. That in the order, we have given man, nature and the two effected in the arts — in the large sense. That while dealing with a matter of import to the world of man, it continually satisfies the intelligence by its content, and finally results in a production extremely worth while when measured in terms of the boy's life.

2. That of first concern was the establishment of the human and world relations involved, for not only may the *shop-work* contribute something directly to a sense of the historic, human brotherhood, and so really to the geographical, but, in accord with the thought presented under individuality, it is in these things that it finds itself adequately reflected, and hence finds matters most worth its while; freedom coming to individuality as to man in the world, in adjusting itself to what is already achieved, and deriving greatest satisfaction in modifying this in small ways.

3. That in physics and mechanics (nature) we have that from without the self — the impersonal — which kindles the intellect and imagination and at the same time inspires the mind with the stability of the things of law and order in creation.

4. That the imagination, not being crystallized by the presence of a model, *creates* forms from conceptions of functional and mechanical causes and effects, thus giving imagination real creative activity.

2. That the first day in the shop results in *something* that may be taken home and put in mamma's lap is not so important as that it contributes something new to purpose, awakens the intelligence, and creates activity of imagination.

I would commend to attention here the gap which seems to exist between the freer mental work of literature and history, with its full content, and the abstract mathematics with its meager content, and suggest that such matter as the water wheel is concerned with would very effectively occupy an intermediary position.

In closing, space not permitting a summary, I express a conviction that the workshop of the school will soon emancipate itself from the petty and special influences to which it has been subject, and attach itself to the serious matters and methods which dominate the school as a whole.

THE FIELD OF SHOP-WORK IN THE ELEMENTARY SCHOOL

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"Education," says Dr. Emerson E. White, "is a complex process. In its widest sense it includes all those processes, activities, and influences that occasion subjective changes in man, whether the changes be physical, mental, moral, or spiritual. The home, the school, the church, civil society, the state, industry, physical environment, and all else that touches man, are, in this wide sense, educational agencies, and each contributes something to the complex result called 'education.'"

Leaving out of consideration all these agencies save the school, it is the purpose of this paper to discuss one phase of school education, commonly known as "manual training," and this in its relation to the elementary school.

As the end sought must determine the means to be employed in its attainment, I will first state in a general way what I believe this end to be.

The school has always concerned itself with the physical, mental, and moral uplift of the race, and we must defend whatever enters the curriculum on the ground that it contributes in the highest degree to these ends. We must know that its reactions upon young lives will produce a higher type of manhood and womanhood, that it will result in clearer vision and finer feeling, and furnish the strongest incentive to nobler doing. In brief, my conception of the purpose or object of education, from the public-school point of view, is to instill into the lives of the pupils such high moral principles, to give them such facility for obtaining useful knowledge, and such power of all-round expression as will insure to them the greatest happiness thru life, and to society the highest example of true living.

What, then, should the construction work in our schools contribute toward this result?

"Man without tools," says Carlyle, "is nothing; with tools he is all." In Ruskin we read:

> A boy cannot learn to take a straight shaving off a plank, or to draw a fine curve without faltering, or to lay a brick level in the mortar, without learning a multitude of other matters that books could never teach him.

The reason for this is well stated by Professor Henderson in describing the interaction between the inner and the outer world.

> Thought is not carried on in terms of thought, but in terms of things, and is as dependent upon these as bodily action is dependent upon thought. Every bodily experience affects one or more of the sense organs, and sends one or more impulses along the nerves to the central receiving station, the brain. Here something very wonderful takes place, something so wonderful that we have no explanation for it in the whole realm of empirical science. The nerve-current setting in from the outer world to the inner world of the brain manifests itself there as a fact of consciousness, a sensation. All we know about it is that these impulses taken together produce that stream of thought which is the drama of existence. The richer and more varied these impulses or sensations the richer and more varied the stream of thought. With meager sensation comes meager thought.
>
> This perceptual knowledge, this report of the senses, is the only thing that comes to us, and out of it we build the entire world. Reflection and reason make use of this material, but they can add nothing to its original content. It is impossible to overestimate the importance of having the senses alert and keen, that they may report the outer world accurately. It is impossible to overestimate the importance of giving the senses much to operate upon, the largest possible field, that they may report the outer world fully. We want for the complete life the fullest and most accurate perceptual knowledge, and we can get this only thru the activity and training of the senses.

The application in education is obvious. This is what constitutes the great difference in environment and makes one favorable to growth and another unfavorable. "A keen tool with nothing to work upon, a dull tool with a wealth of material, can neither of them turn out much of value."

A great deal of energy is wasted in attempting to get children to reason about a world with which they are unfamiliar. Their stock of perceptual knowledge is so meager that they have no foundation upon which to build. By compelling a strict adherence to a prescribed course of formal studies we cheat our pupils of all perceptual knowledge, except, as some one has aptly said, "what they get on holidays and when they play truant."

Now, it is very largely the province of manual training to furnish this perceptual knowledge—this wide acquaintance with things. "If we arrange a series of bodily acts," says Professor Henderson, "we bring about a corresponding series of mental reactions; and if we arrange the bodily acts with sufficient cleverness, we bring about a series of mental reactions of high educational value." Now this is what manual training attempts to do, and it is in the utilization of this "newly apprehended avenue of approach to the spirit" that the construction work in our elementary schools finds its legitimate field.

It is a principle of all good teaching that the spirit and character of the work should be in accord with the best interests and highest capabilities of the pupil. It is evident, therefore, that any series of exercises, or "bodily acts," in order to adequately represent these interests and capabilities, must be broad in their application. They cannot be circumscribed by the narrow limits of any set course of models. No better can they be served by turning the boy loose in the shop and allowing him to make such use of the tools and materials as suits his fancy. We hear much of late about leaving the boy free and untrammeled in his choice of what he shall do, but, in the words of Professor Bennett:

> We all know that it is the regular business of the school to influence the choice of the pupils. We could not eliminate the personal influence of the teacher or of fellow-pupils or of the school-room if we would, and we would not if we could. To nullify the influence of the teacher would be to repudiate the fundamental idea of the kindergarten—the development of character by means of organized and directed self-activity.

Nothing succeeds like success, and for this reason the pupil should not be permitted, much less commanded, to undertake anything which he cannot do well. He should proceed by easy stages from the simple exercises to those of more complex nature, and every object completed should represent the best that he can do. Nothing less than this should satisfy him. Nor will it if his activities are wisely directed at every stage of his work. Notice that I say "directed," not "led." It is possible to lead a pupil until he becomes a mere blind follower, an imitator, with no power of initiative, no individuality. But by wise direction or supervision his power of initiative is developed, his individuality cultivated.

In manual training, as in any other subject, there are certain fundamental principles that cannot be omitted in the training, and it is this fact that makes the course of instruction necessary.

Now, the question which confronts us at this point is: have our courses of instruction in shop-work been so formulated as to give every child these fundamentals, and at the same time to adequately serve the highest interests and capabilities of each?

In attempting to answer this question, I wish to introduce into the discussion a form of manual training which, to my mind, is peculiarly adapted to the needs of the elementary school, and which, I believe, has done more than anything else to place manual training on the high educational plane which it occupies today. I refer to the sloyd, and I do so notwithstanding that I was informed but a few days since, by a gentleman whose intelligence in most directions cannot be questioned, that sloyd was rapidly becoming *passé*.

Sloyd has sometimes been called the "kindergarten of the elementary school," and very appropriately so, for in fact it is but the application to higher grades of that same principle of self-activity which Froebel made the corner-stone of the kindergarten.

"It is permeated," says Professor Henderson, "with the true Froebelian spirit, and is quite worthy to follow the kindergarten in a rational scheme of education." It stands for all that is best in manual training for primary and elementary schools, and I will add further that it is better adapted to the needs of most high schools than the average course employed in such schools. When I say this I do not wish to be understood as discrediting everything in manual training that does not bear the name of sloyd. To do so would be to discredit sloyd itself, for what manual training stands for today in its most advanced stage, sloyd has stood for since its inception in this country.

A difference in phraseology does not necessarily mean a difference in principle. And this leads me to say that it seems a pity that our phraseology is not more uniform. It is eminently desirable, if not necessary, that we adopt a common distinguishing term for all purely educational handwork in our schools—one that would eventually become at least as definite in its significance as history or mathematics in their respective fields—and I know of no other word that is broad enough to fill this place.

Perhaps the keynote of the sloyd idea is the importance which it attaches to "the great worth and carrying power of right motive." Right motive, or the desire in the mind of the child to realize an end which he recognizes of real worth, impels to right action, which, in turn, leads to the development of the power of concentrating all his energies upon the attainment of the desired end. With this power of concentration comes the power of inhibition in the nervous system.

"The power of physical inhibition," says Mr. Carley, "means self-discipline, and, when coupled with right ethical ideas, means high ethical conduct." This is a consideration of tremendous importance at this particular period of school life.

From the viewpoint of method, sloyd is most thorogoing. It strives to develop the body by a series of physical movements physiologically arranged, to develop the mind by means of the rich mental reactions which accompany all motor activities, and no less to develop the heart by enlisting in all the work the child's good will and unselfishness, and by so doing to cultivate a tendency to healthful sentiments and impulses.

It has been well said that "sentiments and impulses make all the difference between good and bad character." The intellect and the will, to which we usually direct all our attention, are as much constituent parts of bad character as of good, for their highest cultivation is not inconsistent with the worst moral degeneracy. One of the greatest gains in sentiment is cheerfulness in disposition; and let no one suppose that a happy disposition, bred from constant exercises in mastering the tasks of school, will not affect the character of after life.

Truthful care in work is one of the most precious elements of good character. The errors, slights, and misconceptions of the pupil's sloyd work cannot escape detection as easily as in memory recitation studies, while good, honest, careful work will always show for its real value. It often happens that a passing embarrassment so misrepresents honest work in memory recitations that the sensibilities of the pupil are wronged and his feelings biased toward evil and resentful thoughts. This is exceedingly unfortunate from a moral point of view.

Having taken the stand in favor of sloyd pure and simple, as the best form or system of construction work that has yet been devised for elementary schools, I wish to notice briefly some of the criticisms that have been and still are urged against it, and try to show that such criticisms are due to a general misconception of its fundamental principles.

Some say it makes mere imitators of the children; that they simply copy what some one else has worked out for them, and no opportunity is afforded for independent thought. To this I answer: It is a fundamental principle of all sloyd work that each effort shall be a direct product of the pupil's own thought. Conceive, if you can, of a boy making, for example, the sugar scoop without first forming in his mind a definite and intelligent plan of operation.

The trouble with this class of critics is that they look only at the outward forms, and fail utterly to comprehend either the principle or the method of the work.

Then there is a much higher type of criticism coming from those who have looked more deeply into the subject and who realize the absolute need of systematic work; yet they feel that a close adherence to any course of models is open to grave objections. They argue that no course can be devised each piece of which will appeal to a large number of children as something in itself worth working for, and, as a result, the work is not done under the best motive. They further urge that the pupil's initiative is not given opportunity to develop.

To the first I would say that a *close* adherence to any course of models is contrary to the spirit of sloyd. If a model in a given course meets the needs of one child and not those of another, it should be used in the one case and not in the other. The course of models is not an inflexible thing that must, in all cases and under all circumstances, be adhered to. Even the series of exercises may and should be varied to suit individual needs. I realize when I say this that I am setting a high standard for the teacher, for the selection of the specific exercises best suited to the needs of each child requires a fine power of discrimination not possessed by the average manual-training teacher.

As to the second objection, I cannot see why sloyd methods should interfere with the development of the power of initiative. Of course, if the teacher must be eliminated before this power can be developed, I can see where the interference occurs, for sloyd insists upon a wise supervision of all the pupil's acts. But this supervision is not inconsistent with the cultivation of the power of self-expression, for self-expression does not necessarily mean invention or origination. As well expressed by our president, Mr. Richards, "It means putting the worker's own thought and feeling into the thing he is working upon, rather than some other person's thought and feeling."

And this is the true sloyd spirit. I think it was Coleridge who said: "If genius be the initiative and talent the administrative, sense is the conservative branch of the intellectual republic." Substitute in this quotation "sloyd" for "sense," and "field of manual training" for "intellectual republic", and you will have the position sloyd occupies in the field of educational manual training. If genius be the initiative and talent the administrative, sloyd is the conservative branch in the field of manual training.

But, however excellent the principles of sloyd, they fall short of their purpose unless wisely administered; and this brings us to the question, Who shall be the teacher? The question has been variously answered by the action of school authorities all over the country, and the way in which it has been answered has determined the degree of success or failure of the work wherever it has been undertaken. Too often the only consideration has been mere skill of hand. Any ordinary mechanic has been thought good enough to direct the work of the shop. Culture and refinement have not been deemed essential qualifications of the manual-training teacher. The boys and girls have learned to look for these qualities in their other teachers, but when they enter the shop they expect to find a man with limited education and little culture, and they are surprised if they find instead a cultivated, scholarly gentleman.

This is the kind of an answer that has hindered the progress of the work more than anything else. I believe, with Mr. Keyes, that "the only way the friends of manual training can so improve and elevate that work as to make it sought for by the best people in every community is to labor for the improvement and elevation of the manual-training teacher, with special emphasis on the "man" and the "training."

When we are able to place in our school shops teachers whose personality compels respect, and whose general culture, wealth of knowledge, and power of expression, both lingually and manually, is such as will excite the admiration of their pupils, and create in them a desire to cultivate like qualities in themselves, then opposition to manual training will cease and the public will recognize the manual-training teacher as belonging to the very highest rank of the profession.

POSSIBILITIES OF ART EDUCATION IN RELATION TO MANUAL TRAINING

BY ERNEST F. FENOLLOSA

I naturally approach this complex subject from the point of view of art, because my experience for twenty-five years has fallen chiefly in that direction. My knowledge of recent methods in manual training was so meager, and I felt so little able to put before myself the immediate problem of the grade-school teacher, that I shrank from accepting the invitation to read this paper. Professor Richards, however, overpersuaded me, on the ground that, in taking a larger view, based upon the art and social experience of several races and of many times, I might be able to contribute some suggestions of value.

In the first place, I find it extremely difficult to conceive a clear line of division between manual training and art education. The two are not merely entangled, but identical. We cannot draw the line, as the word "manual" seems to imply, at hand-work, for all forms of visual art demand the highest muscular skill. Neither can a difference in use justify the cleavage, as if industry produced utensils to be consumed, but art, luxuries to be treasured. Our modern collections in art museums have deceived us here—so many thousands of pictures and statues torn away from the places and uses which once gave them value.

Shall we, then, fall back on difference of plan, shop-work dealing only with laws of mechanical structure, art with spiritual? There, if anywhere, the line would cut. But such a limitation implies too much modesty and abnegation on the side of manual training. It defeats the specific end of a rounding out and synthesis of human faculties. It was a good thought to supplement book-work with hand-work, and thus get away from abstractions. But if we confine the plan of work to mathematical and physical laws, we get right back to abstractions, in somewhat the same way as the old art teaching which harped upon type solids.

But the weakness of separation shows up more glaring still from the side of art. Painting and sculpture are but branches of useful industry, ways of treating material surfaces, the plaster and the bronze of architecture. Art infuses harmony into all man's surroundings, transfigures with some new law of his spirit the material which he touches, makes virtual extension of the realm where internal affinities supplement external restraints. Beauty exhibits a kind of higher economics, in which waste and even compromise must be eliminated, in that each part helps all and uses all. A thing, therefore, can have no real beauty if its material values be not involved in the harmony.

Hence I urge the union of art education and manual training on higher grounds than the clamor of industry for superficial ornament; I declare it to be involved in the very life and health of art education itself. As a student of the history of art, I assert that the great creative impulses of all races and times have sprung from the needs and laws of structure. Not only is this clear in the simplicity and structural quality of all Greek ornament, but it is involved in the fact that the greatest schools of painting itself have grown out of mural painting. There boundary of column and arch and structural spacing furnish the very key to composition; the lighting of the wall strikes the note of the necessary values; and the colors of surrounding materials govern the pictorial tones. The so-called "easel-picture" that starts from blank canvas, with no trace of structural key, has seldom furnished seed for a great school of art. It gluts the market, as we see in our exhibitions, with unusable objects, fit only for the mausoleums of art galleries. But the vitality of Greek mosaics, of Italian frescoes, of Chinese and Japanese mediæval painting, springs solely from the fact that structural problems furnished the seed for the æsthetic. So with sculpture. Greek statues, torn from their appropriate niches, crowded into the palaces of Roman conquerors, eventually dug out of the ruins of those palaces and set up artificially in Italian gardens, have at last come to litter the corridors of our museums, thus becoming virtually threefold abstractions. And the worst of it is that we go on creating more abstract Venuses to crowd more corridors.

Why has this fatal gap between art and structure been allowed to vitiate the work of our schools? My answer is, because the nature and aim of art has been falsely conceived to be representation. In all the discussions about art in schools, I see talk of landscapes and dramatic groups, of technical advance in shadow drawing, perspective, anatomy, and of the separate study of noses and toes. Art, we suppose, is the painting of things, and therefore, if we let children sit down and express their crude ideas, it will be the natural beginning of art education. Somehow or other we seem surprised when we find that children of the middle grades have learned practically nothing from all this, and are quite incapable of any systematic progress. But there need be no surprise. Leading artists whom I have talked with in New York and elsewhere generally condemn this realistic art work in schools as waste of time. No child, say they, under the age of fifteen or sixteen can master the scientific analysis necessary to represent with accuracy. And this opinion seems to be borne out by the experience of our teachers.. There is no progressive way to teach these abstract means to the child mind.

But even if this elementary work in representation were practical, it had absolutely nothing of help to offer the manual trainer. He, weighted with the inertia of matter, asked for a hint of grace to enliven his mechanics, and all he could get in reply was how children tell a story. Perspective, and anatomy, and cast-shadows, and reflected lights are useless to him.

Of themselves they imply no harmony, no proportion, no graceful adjustment, no interior law.

And here we come flat against the great antimony of modern art, the dualism, nay the *divorce*, between representation and design. Before the year 1600 no such gap existed. In no creative era have painters suspected that their work differed from industry. It was only after pride in the mastery of realism led to the conception of painting as an intellectual and academic exercise superior to craft that design fell into contempt. We now admit that industrial ornament may be conventional; but, in order to prevent its poisoning our academic courses, we shut it up in water-tight compartments, labeled "design schools." In 1887 I visited the South Kensington Museum and Academy, which had been founded by the English government for the very purpose of building up national design. But the director confessed to me that the purpose was practically defeated in that all the best pupils insisted on taking the painting and sculpture courses, leaving only the incapables for the inferior work.

And that this ingrained prejudice against design lingers with us today is proved by the enormous disproportion between demand and supply in art. Here we have tens of thousands of abstract paintings and sculptures dumped upon the world year after year, with no purchasers; while on the other hand our manufacturers in vain offer large prizes for corps of designers, who have to be supplied chiefly from Belgium and France. We see in it the fact that we still assume proper art work in schools to be based upon representation. We see in it the persistent use of the word "conventional," which, in the very arguing away from representation, still takes representation for the starting point. We see in it the preference of the superficial term "decorative" to the vital term "structural."

But this antimony, this divorce of representation from structure, is a mistake. It is not that one approaches nature and the other recedes from it; it is that under both lies a common set of vital qualities which define their value of art. These are the qualities of unity, of harmony, of affinity, between line and line, mass and mass, color and color. These comprise a whole new world for study as truly as do the laws of harmony in music. This is what distinguishes art from not-art. If a design has those visual harmonies it is good. If a representation has them, it is good. If it has them not, it is bad as art, no matter how good it may be as representation.

I am not the least surprised to find that the representative art work of children does not improve, rather degenerates, above the first and second grades. What else could we expect? If it could improve, it would be only because conscious mastery of these underlying harmonies were taught. But it is not taught. The seed of art is not nature, but the consciousness of harmony in the mind, which goes out from itself to see beauty in nature. The country bumpkin finds nothing in the sunset that nightly would minister to him. But the child, whose keen grasp of harmony has been stimulated, not blunted, recognizes all beauty in a common leaf. Therefore, art education can be nothing but the orderly stimulation by exercise of this power to perceive and create beauty.

Now, the best and most natural exercise of this faculty is found in beautifying the products of human industry. It is a mere accident of habit that we should study line harmonies in the form of pencil marks on paper. These are abstractions from reality. Better to find them in the lines of support and stress, the patterns of weaving, and the yielding contours of pottery. Here they are realities, and here the child feels their identity with human needs and human history. Let us create in matter, not merely on paper.

One of the most vital thoughts of manual training has been to follow the course of evolution in leading human industries. Here the structural need spells itself out to the child as to the primitive man. But how if the æsthetic need, the order of the synthetic line and color problems, were found to follow essentially the same course? The simplest line relations should spring naturally from the simplest industries. The savage hut would grow into the Greek temple by a progressive refining of lines which were always structural. The study of dark and light would follow, not the difficult representation of shadows in drawing, but the way in which the indentations and openings of structure contribute to the beauty of things. We need not be forced here to press history too far. Still it remains true that all the artistic possibilities of line problems lie wrapped up in the indications of the loom, the forge, the potter's wheel, the contrast of supporting posts with horizontal lintels, in the strengthening transition of the diagonal bracket, and in the supreme synthesis of the arch.

If this be true, it will not be difficult to state an important practical law in all art work. This is that all line and color systems should utilize, spring from, carry out, enrich, but never obscure, the structural elements given in the uses, forms, and materials of things. This rule is as absolute in the highest realms of painting and architecture as in the lowest of basket weaving. It distinguishes strong art from weak everywhere. It is a rule which manual training is in a natural position to apply for itself.

Let us follow this matter a bit further. Art consists in the positive value given to each other by a group of contiguous visual areas. One of the simplest kinds of such value is given in the proportion of these areas. In fact a feeling for fine proportion is one of the natural instincts of the human race. But all industrial structures present contiguous areas; for instance, the sides of a piece of furniture, the spacings of roof, wall, and story in buildings. Here the use and the structure furnish a plan, or key, which the art instinct is asked to refine, not obscure. The beauty must be made to lie in these main spacings. But we violate this law everywhere in the crude notion of applying ornament. Wherever we see an empty space we rush to mar it by filling it with trivialities. All inlay, all shadow mottling, all color, which violate the large proportion of these spaces are vicious. The most complex figure painting, if it be good, carefully divides a few main areas.

The next step is to perceive that these areas, to be clear, must be bounded; hence the presence of line in all art. But the lines of things are structural where planes intersect or stresses converge. Curves are the expression of resistances. You can feel them in your thumb. Now art takes up these lines and refines them to a single, clear impression. It does not impose something alien upon them. It expands them into fuller meaning. They still underlie and guide its most complex system.

How opposed to almost all our ordinary methods of drawing and designing is this rule! We sprawl our lines lawlessly anywhere over our paper or wood, making arbitrary curves and systems which only deface our surfaces. Let all lines spring from the main lines. How splendidly painting follows this rule in the composition of Raphael's Vatican stanza, and sculpture in the infinitely complex draperies of the Parthenon pediments! Structure forms the backbone of such ultimate line systems. But the law may be first exemplified in pottery.

Next we may see that our visual areas can be harmonized, not only in terms of their proportions, but in terms of their varying luminosities, the quantities of light which they severally reflect. It is not that dark and light spots are to be sprinkled about at will, but the law is that this dark and light must follow the dark and light of structure and yet be beautiful. Any artificial inking or modeling which breaks the silvery luminosity of the planes is vicious. Materials, too, may give us these masses, as when bronze comes out dark against white marble.

More constantly than any other we violate this law. All poor drawing and painting relies upon the accidents of vagueness. We muddy our tones instead of keeping them flat and clear. But the best photography from nature often gives us composition in three clear values. This is why methods of stencil work and block-printing, too, are so valuable in elementary study that they secure flat tones and give scope for easy variation. Power to create in two or three tones underlies all the complex combinations of painting. The whole subject can be worked out in the course of rug designing.

For three-dimensional study wood-carving has points of advantage over clay-modeling. It gives firmer lines and planes. In clay we smear weak, curved surfaces. In bad drawing we try to make things look round. But the great problem in art is not to make things look round, but how to make round things look square. We must conceive of solid things in planes. It is difficult, in clay, to produce the impression of firm planes. Both in our bad modeling and bad drawing we treat nature as if made up of tufts of wool or cannon balls.

So, the lead pencil is the worst possible tool to draw dark and light masses with. Pencil blacks have no flatness and no luminosity. They give tones like the grizzled head of a negro.

Lastly comes .the grouping of visual areas according to the *quality* of the light with which they are charged. Here structure finds play chiefly thru materials. The color scheme of a room is guided by the wood of its furniture, exterior house tints by the nature of landscape surroundings. But the color must not violate the purity of the large planes, thus distracting attention from the structure. Moreover, it should be simple. To let children run wild with a color-box is almost as criminal as to let them play with gunpowder. Yet the three-color box is too limited. In the real art of color there are no primaries. Any groups that neutralize, out of thousands, may be taken as primary in their own key. Therefore, we must constantly vary the tints we use, in order to advance in power over color. Perhaps one good method is sometimes to follow the evolution of pigments in industry. Color is a wonderful great world of law, which has hardly yet been explored. It is a mistake to give it to children freely, just because they want it. The color sense is the latest and least developed in the human race of all the art instincts. To make it take the place of simpler and clearer work is to violate the order of nature and of evolution. Young children are interested more vitally in actions, and color lends least of all to the expression of action. The child's liking for color is, therefore, mostly aimless play.

I come, lastly, to what I conceive to be one of the highest merits in this view of art, namely, its identity of plan with physical and social life.

Such discipline in synthesis should have the highest spiritual value. The enthusiasm for fine proportion, which becomes a second nature, should transfigure our whole life. Every case of art is an enhancing of mutual values thru contact. A color, like a man, becomes utterly transformed thru its surroundings. The circle of the parts must be complete; all are essential. Art so conceived gives us the type of positive economy, where each member is used to the full. It admits no loss, no waste, no clashing, no friction. It is literally transposed, for all the parts are reflected thru each other. Such ease and perfection are found in normal animal life, the delicate feline curve, the sturdy tower of the pine. So the impulse in man to feel beauty and to create it should be one. There is positive muscular delight in drawing a fine curve. So good carriage, graceful manner, genuine greeting are the incorporation of this order in ourselves — a true species of art. Even character takes on an unconscious charm, as if its beauty were rather of a flower than of a gnarled oak.

The social value of such art education would be twofold. Its identity with the manual or industrial side brings personal work into conscious harmony with the great currents of civilization. Art, however individual in its creation, is no selfish loiterer in a detached heaven, as some sneeringly suppose. There can be but one Shakespeare, and one Beethoven; yet they have widened the very definition of humanity. . So the pupil may feel that in his contribution, however humble, if it be genuine, he adds a new unit, a new art individual to the sum of human treasure. And this treasure is to be no mere luxury for the galleries of the rich, but shall illumine the daily toil and consumption of the masses. In Japan today thousands of new designs, simple and fine, are turned out in cheap printed cottons for simple clothing every year and every month. The national consciousness fairly bubbles with creative energy. Art is primarily social.

But a second and more subtle social value is given in the very type of being which such art embodies. It brings virtually a new dispensation, the age of harmony. A mechanical world carries us out and off into endless series of time, space, and cause. A utilitarian opens up endless lines of means. But all imply simple process, change; there is no mutuality, no integration, no return into the self. So the world of scholastic logic, which shuts over the European brain a cap of Chinese formalism, can do nothing but run up and down endless scales of classification. Classification always accentuates an abstraction, a point of transition, as if our bamboo should be nothing but joints. When I pluck a flower or cut a seed to study it, I tear into death the very life I wish to observe. Definition is innocent of the element of reciprocity. Nothing really acts singly; give becomes take; all negation is reaction, as positive a process as action.

Now, if there were a kind of being in which mutuality reigned supreme, and all modifications became simultaneous, so that we must see all to know each one, this would give us a higher logical type, fitly to be called *harmony*. Such, indeed, is art. And it is clear that similar terms might be used of an ideal society. Art gives an approximate definition of the state; for in an ideal state each individual should help all the others to be themselves, call out their positive powers, so that from such perfect co-operation a larger freedom of social life shall spring. Every great work of art is thus virtually a lesson in good citizenship. And so, without superstition, and in no mystical sense, we might regard the power of creation in art as literally bringing the order and type of spirit to earth, and incorporating it in man's material life.

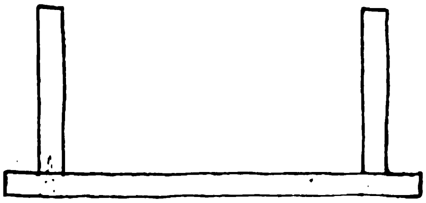
PRACTICAL CO-OPERATION BETWEEN ART AND MANUAL TRAINING

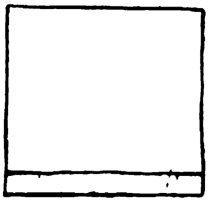
HAROLD PEYSER, INSTRUCTOR IN MANUAL TRAINING, PUBLIC SCHOOLS, NEW YORK CITY

Manual training used to mean, very literally, hand training. We aimed, by a series of *exercises*, to impart to the pupil notions of method and accuracy. Nowadays I think we have gradually come to the conclusion that, while method and accuracy are desirable and necessary qualities, the aim of manual training is rather to cultivate an appreciation of the proper use of material in adaptation to ends; how to bring construction and art together to make the useful beautiful, with a beauty that is simple, restful, harmonious.

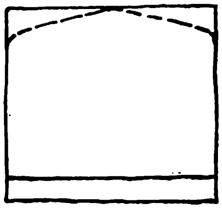
We want our schools to lay the foundation of that good taste which will make of us a nation of lovers of the beautiful. We will demand, then, of our manufacturers that the commonest utensil of everyday use, turned out by the thousands perhaps, shall be beautiful as well as useful. Necessarily, a mere series of drill exercises would not help much in furthering our object. We must have a number of constructive models, admitting of original thought on the part of the pupil, and whose execution will show the qualities of the material he works in, its uses and its beauties.

In designing something for any given purpose, the first consideration is the fitness of the material determined upon; does it answer all the requirements of utility? Second, what must be the general form of the object for the given use? Art now steps in and makes of the merely useful form a beautiful one; it also discovers the inherent beauty of the material. This determines the nature of our decoration, which must be a part of the object, growing out of it, conditioned by it, and not something foreign that is grafted on. Design should be worked out from the object, not on it; it is not a study of abstract spaces and ways of filling them, and should certainly not be taught in the class-room as such. Given a beautiful form, our decoration must bring out its beauty and add interest to the surface.

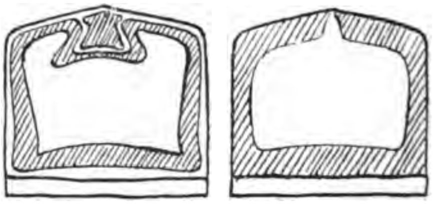




There are many forms that manual training takes. I will use some of the more important ones and endeavor to show that the method of considering them all may be essentially the same. Let us take up constructive design in wood first. Say we want to make a book-rack. We are agreed that wood is eminently fitted for this purpose. We determine upon the length, width, height, and method of fastening ends to base. Here is the purely mechanical side of our work; it gives us a block form.



Now, we ask, what are the characteristics and beauties of wood that we must take into account in modifying our type form? It is fibrous, therefore the lines of our design should be simple and strong. It has a grain which can be brought out by staining, polishing. If we use color it should not be opaque, and thus hide the grain. In other words, our design should be strong, broad, and woody. Our first problem in design might be to modify the end of this book-rack, keeping it simple, making no projections liable to be broken off, using as far as possible a line that is continuous and directive and that gives the appearance of strength. I have here a series of such modifications that were worked out in the class-room.



The second problem is to work out of our space a pleasing design, that will stay flat, whose lines will harmonize with the shape of the end and its colors with the color of the wood. What are the limitations of our design? It must be basal; chief interest will center at the top. We may decide upon a border design which draws attention to the outline, or upon an all-over design which makes the surface the more important beauty. In the first case we might use, say, a stem form, following the outline, working into a leaf or flower form at the top, and a root form at the bottom, sufficiently heavy to give the proper basal effect.

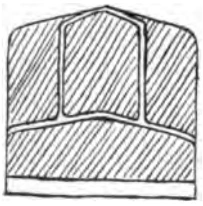


FIG. 1

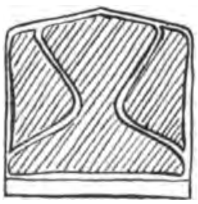


FIG. 2

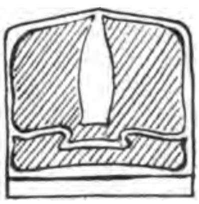


FIG. 3

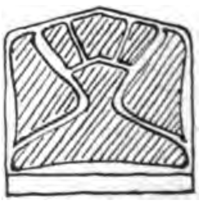


FIG. 4

On the other hand, if we decide upon an all-over design, we must divide our space into a series of masses. Take the same end, as example: Figs. 1 and 2 are purely abstract; 3 makes use of a leaf form; 4

takes the spacing of 2 and uses conventional flower forms. I present a number of models which have been worked out in this manner. Matchbox, bracket book-rack, box, bookcase. The method used in doing the work was as follows: After it was well sandpapered the design was marked on the wood heavily with a soft pencil; the wood was then stained with oil paint of the desired shade, rubbed in hard; then the design was painted in water color, outlined with India ink, and finally, when thoroly dry, rubbed with boiled oil, to which was added about 10 per cent. of hard-oil finish.

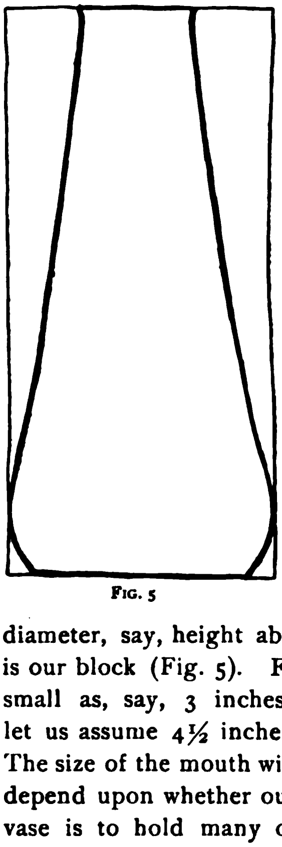


FIG. 5

There can hardly be any doubt as to which sort of work makes a more lasting impression on a child — mere drill work or that in which there is the interest of originality, of use, of beauty. We can get the same drill if our models are designed properly. Naturally, the early ones will be very simple, demanding little in design and execution, becoming more and more the product of the pupil's own thought as he goes on. If clay is our material we might start with a small tray form, merely turning up the edges, working up into bowls, vases, etc.

Say we desire to make a flower vase. We present to a class approximate height and diameter, say, height about 12 inches, diameter about 5 inches. Here is our block (Fig. 5). For stability the base should certainly not be as small as, say, 3 inches; let us assume 4½ inches. The size of the mouth will depend upon whether our vase is to hold many or few flowers; say we make it 2 inches. For the given purpose, our form should be graceful, springing, and yet have strength. The beauty of pottery is in its *form* and *color*. A vase should not be treated as a surface for a painting or for elaborate relief work. The decoration should be simple, broad, flat, highly abstract, and characteristic of the form. If this is low and broad, then the line must suggest stability and weight, the design must give emphasis to the base and mouth and be

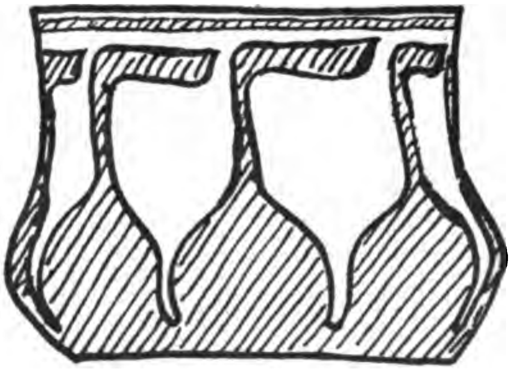


FIG. 6

weighty in effect. If the form is to be tall and slender, then the line must suggest an upward growth or spring. We give more emphasis to the top and side. I present some vases which were designed in this way (Figs. 6 and 7).

Weaving, it seems to me, offers excellent opportunities for the cultivation of the art sense, and will undoubtedly take a much more important place in the field of manual training than it has up to this time. The closer we adhere to the limitations and feeling of our material, the finer is our product. The weavers of the East understood this so well that their work has never been surpassed. What is the beauty of a woven material? Its surface, due to kind of thread used and the method of weaving, which affects the play of light; its color, harmonious and level in result. Woven designs should partake of the mechanical nature of weaving, and therefore should not be naturalistic.

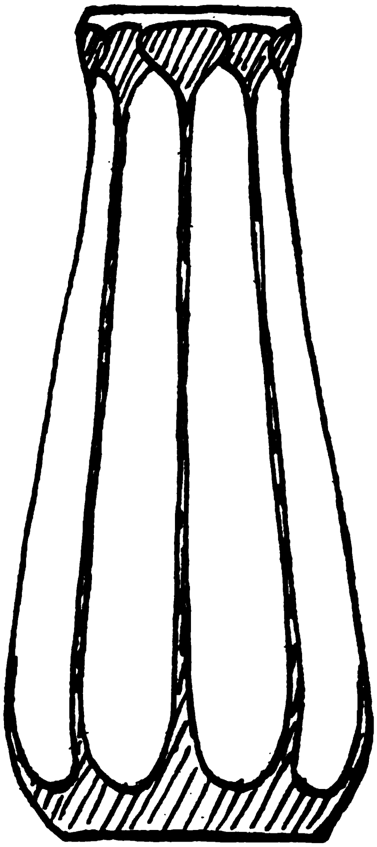


FIG. 7

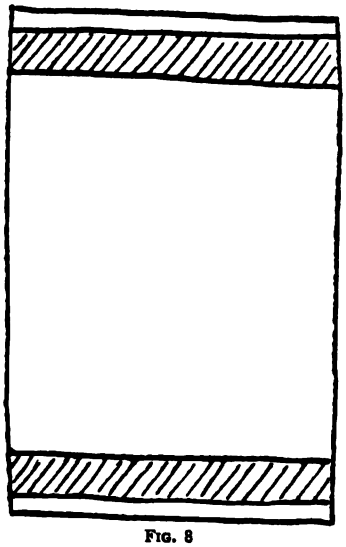


FIG. 8

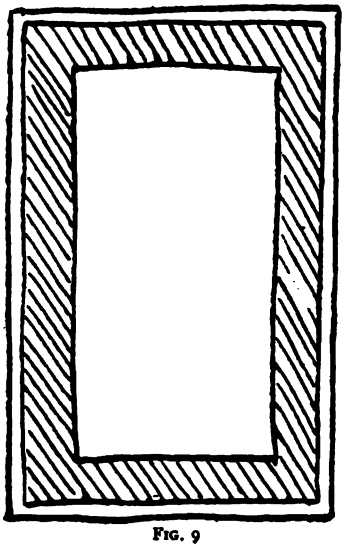


FIG. 9

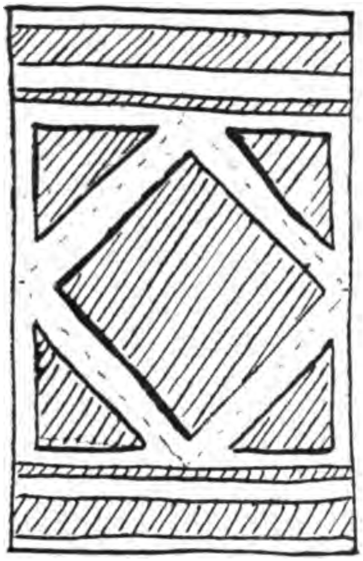


FIG. 10

The forms are either of a given length and width, as in blankets, rugs, etc., or in continuous lengths. Say we decide upon a rug as our model, with wool as the material, and ground color, as some soft shade of green. How shall we determine the sort of design to use? A band, or a series of them, at the ends of our rug, to emphasize the fact of definite length, is the most natural first step in decoration. This would be the most elementary form of design. The bands should be a little heavier than the body color (Figs. 8 and 9).

A further step would be to continue the bands on the sides of the rug. Then we can break up the center space, using simple motives, such as lozenge, cross, or other geometrical motive. In a continuous pattern (Fig. 10), the design should have no definite direction unless the purpose for which the material is to be used requires it, as in weaves used for hangings.

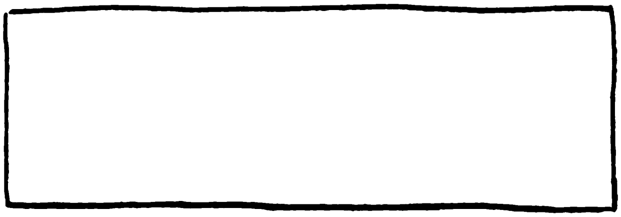


FIG. 11

Basket weaving may be treated in the same manner. Say the problem is a work-basket; material, some kind of rush. The type is a fairly wide and rather shallow one.

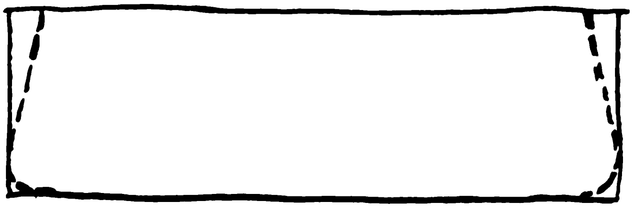


FIG. 12

Assume diameter and height; then in this given rectangle we can work out a great variety of forms (Figs. 11, 12, and 13).

From the nature of the material, we can see that the decoration should consist of bands, or combinations of them, following the weave. The placing of the design is worked out in the same manner as in the previous examples. In the given type we put a band at the top by coloring the rush, or thickening it, or both, to emphasize the broadness and to give finish. Coloring the rush at the bottom gives the required basal effect. In a high basket, vertical bands must be worked in to emphasize the height and form (Fig. 14). In each case we see the method of approach is the same; we take a block form which is modified in accordance with the purpose of the thing we are making; then we work out our design from the characteristics of the form and the material.

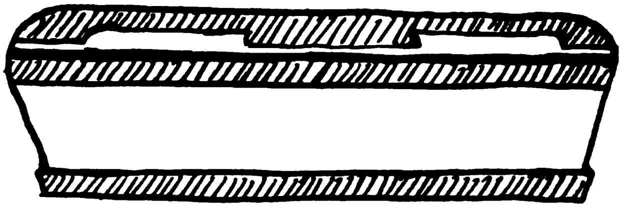


FIG. 13

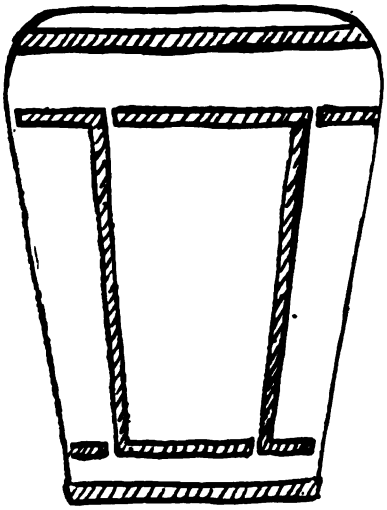


FIG. 14

DISCUSSION

W. H. HATCH, superintendent of schools, Oak Park, Ill.—As I have not been able to see the paper just read before its presentation, I have not been able to prepare a discussion of its subject-matter. But as I was requested to present a discussion from the standpoint of a superintendent of schools I will suggest three points, a careful consideration of which may be suggestive along the line of the topic of the paper:

1. A broader view of the work by both the teacher of art and the teacher of manual training; a fuller appreciation of the relations of the two subjects. The teacher of man-

ual training too often has but little use for the free-hand blotches of the art teacher, and the latter is equally disturbed by the mechanical formalism and rigidity of the former. Each must admit that the other has something of value to contribute to the well-rounded whole. On the part of the art teacher we must hear less of art for art's sake, and more of art for the child's sake. On the part of the teacher of manual training we must see less of the constructive exercise that is an end in itself, and more of the making of objects that have an immediate purpose in the life of the child. No one will deny that one function of art instruction, and doubtless the highest, is to develop in the child an appreciation of the best in art; to cultivate a love for the beautiful as produced in color or in form. Nor will we deny that in constructive work the great aim is the result to the child, and that the object made is secondary. But there is a phase of art and constructive work that touches more closely the lives of all. A large part of man's constructive and decorative activity has to do with the common articles of daily life. He has in all his history first made an article to meet some need in his life, and then decorated it. Crude have been his attempts and slow his progress, especially in the latter. One has only to look about him to see the great lack in fitness of structure to use, and the barrenness and lack of artistic taste in our architecture, the furniture in our homes, and our mural decorations. The artist produces something beautiful in itself, and the artisan an object of use to man, but how rarely do the two work together and produce an article or a structure that fills the needs of man in its use, and that is decorated by the artist in such manner as to satisfy the æsthetic in his nature. Structure that is in harmony with function, and decorations that are beautiful and that fit the place for which they are made, are far too rare. The movement for fitness in form and decoration of the common articles of the home that is so greatly forwarded by the arts and crafts societies in our cities may be, I am confident, greatly accelerated by a cordial co-operation of the departments of art and manual training.

2. Both departments should more fully recognize the conscious needs of the child. He does not put much of himself into any exercise unless he has an immediate end to attain. If an article is to be made, a pressing need for its use in his little life adds greatly to the value of the exercise. The greatest teacher is he who brings the child face to face with each problem of the school life and instills within him the feeling that it must be solved. The method in which he does the work is of far less importance than the state of mind in which he approaches each exercise. This is more plainly seen in constructive exercises than in any other work of the school. If the child has a strong conscious need of the object to be made, he will find some way in which to accomplish his end. The skillful and sympathetic teacher who gets near the child and understands the needs of his little life, if he have only pencil and paper, or jackknife and board, will do more for him than can be done in the best equipped shop with the most elaborate courses that must be slavishly followed. Our best-devised schemes are too often only stumbling-blocks in the pathway of the live teacher and the eager pupil. This immediate conscious need must not be the end. It is merely a starting point for the teacher. His work is to enlarge this need into something broader that will lead the child to higher needs and broader fields.

3. More attention to these departments by the superintendent of schools. There is always danger that the teaching of the specialist will tend toward narrow and unrelated work. It is said that "thinking is seeing relations." If the relations be broad, the thought should be broad. The course of instruction in the education of the child covers a broad field. In it there is no place for the work of the specialist in the narrow sense of the term. The teacher must know the child in his relations to all other subjects to teach well in any. The fads are so called because they have been considered as bearing no relation to the other subjects in the course; and too often this has been true. Added value is given to these subjects when they are no longer considered *special* studies, but an essential part of the course. The superintendent has paid too little attention to these

departments, but his work is not fully done when he leaves their direction to other hands. He may neither be an artist nor have the skill of the artisan, but he should know children and what phases of child development are to be touched by each subject. He is in better position than any specialist can possibly be to see the needs in the course of instruction and the means to be employed in supplying these needs. It is his function to bring into harmonious relation all the forces employed in the system of schools that he directs.

HOMER H. KINGSLEY, superintendent of schools, Evanston, Ill.—There is one fundamental principle governing this relation of art to manual training which I believe we must all recognize, viz., that the cultivation of the eye and of the hand cannot be divorced. The hand cannot be taught to execute unless it has an eye to govern it, and conversely the eye cannot apprehend a problem unless it has a knowledge of the conditions of the problem, such knowledge having been gained by means of the use of the hand. In other words, a teacher of manual training should have his pupils work from designs which they themselves have made under the instruction of an artistic designer. An art teacher cannot give instruction to such a student unless he is familiar with the materials with which the manual-training teacher has to deal. The great difficulty in correlating these branches is the too frequent lack of training of the designer. I have frequently seen attractive designs on paper intended to be worked out in wrought iron, but so designed that no artisan could execute them; designs for wood which ought to be worked out in iron; and terra cotta designs where stone was the only legitimate material to use. Mere charm of outline or beauty of form expressed on paper are of no practical value nor of any artistic merit unless it is known whether the article is to take a tangible form in wood, or iron, or clay, or glass, or stone, or leather. The actual manipulation of these materials on the part of the designer is the only thing which will give familiarity with the possibilities and nature of materials, and consequently enable him to prepare for the manual-training department those designs which can be executed in the proper media there. It seems to me entirely feasible that the scientific-construction man should supervise the designs of the art department, and that the art department should familiarize itself with the possibilities and actualities of the shop. There need not be any friction between the two, but each ought in effectiveness greatly to multiply the other.

I believe we should raise the standard of all our artistic and manual-training work by observing rigidly a few well-established principles, well established as principles, but unfortunately not well established in practice, or in general recognition in our public-school work, and I speak particularly of this because I have seen such lack of its application in many exhibitions of sloyd and manual-training work.

First, the form of an article must be in keeping with its function. A pitcher from which you cannot pour water without submerging yourself, the table, or the floor is not of good design, however beautiful it may be in form; a cup with so small a base that a breath of wind will blow it over is not of good design, however beautiful it may be in proportion; a chair in which you cannot sit with comfort is not of good design, however expensive the carving or rare the wood; a spoon is not of good design unless you can eat from it with convenience, however richly it may be engraved or ornamented. The fundamental object of the pitcher is to pour water, of the chair is to furnish you a comfortable seat, of the cup is to hold tea or coffee, and of the spoon is to enable you to convey food to your mouth in safety and leave it there with grace; and whenever any one of these principles is violated the design is poor.

Second, the material used must be consistent with the object made; in other words, honesty of material is a second fundamental feature of good design. A galvanized iron cornice sanded to represent granite is a fraud; a column covered over with paper to represent onyx is a fraud; a chair with a design stamped upon it with a hydraulic press to represent carving is a fraud: a gas log in a library with cast-iron holes in it and cast-iron insects crawling over it is a fraud; a cylinder of white glass at the tip of a gas fixture to represent a candle is a fraud; and I might multiply these illustrations indefinitely. You have only to go into the average home to find plenty of them.

Third, in addition to the two features which I have already mentioned—viz., form adapted to function, and honesty and consistency of material—a third element of beauty and grace must be added to make the thing complete. These three features require the skill of both the artist and the artisan. In other words, it is not enough to have the services of the engineer, but we must have the services of the poet as well; but a poet cannot be a poet in this line of work till he has been first an engineer, or, as someone has tersely put it, "The whole problem of good design is to solve the problem of utility in terms of beauty."

Again, I wish to emphasize the fact that it is the constructive nature of the child which we wish especially to cultivate. When we reflect that practically all of the progress of the world has been based upon the work of the constructive imagination of men, we see the necessity of cultivating that power of the child in our school work, and making the child produce the design which he is to interpret in the shop. Let the child produce the design, let it be refined by the suggestion and constructive criticism of the art teacher, and let it find its complete and tangible expression in the shop under the direction of the manual-training teacher, and always with this thought in mind: To develop character, not alone character as expressed in honest construction, which is the usual educational plea for manual training, but character as expressed in recognizing the value of all materials and their inherent fitness for certain purposes; that is, original, honest uses, and not imitations. Real character manifests itself not only in the honesty which comes from doing a thing well, but more especially from doing honest things.

DEPARTMENT OF ART EDUCATION

SECRETARY'S MINUTES

FIRST SESSION, WEDNESDAY, JULY 9, 1902

The Department of Art Education met at 2:30 P. M. in the chapel of the state university.

In the absence of all of the officers, Miss Bonnie E. Snow, of Minneapolis, the chairman of the local committee, took the chair. Miss Janet M. Stevens, of Faribault, Minn., was appointed secretary *pro tem.*

The program was opened with a selection on Musical Glasses by Odin Wold and Claudia Wold.

Miss Snow made brief introductory remarks, and then named the Committee on Nominations as follows:

Miss M. E. Roberts, Minneapolis, Minn.
Miss Annetta Wales, Milwaukee, Wis.
Miss A. May Pierce, Boston, Mass.

The first speaker, James L. Hughes, inspector of schools, Toronto, Can., was then introduced and read a paper on "Art as an Educational Factor."

An interesting and somewhat spirited discussion followed, participated in by several members.

The Lorelei Ladies' Trio then sang "Ave Maria."

The next paper, "Elementary Preparation in Drawing for Secondary Schools—What May Reasonably be Expected," was presented by Clarence Valentine Kirby, teacher of art, High School, Denver, Colo. Mr. Kirby illustrated his paper with blackboard sketches.

A brief discussion followed.

This closed the program, as both Miss Lucy Silke, of Chicago, who was to have read a paper on "Sense Training and Art Education," and Mr. Frank C. Bray, of Cleveland, O., whose subject was "Specifics for Ugliness," were absent.

The business was then taken up and reports of committees called for.

Dr. Langdon S. Thompson, of Jersey City, presented the report of the Committee of Ten appointed at Washington in 1898. The report was adopted and ordered published in the *Proceedings*.

The Committee on Nominations then submitted the following report:

For *President*—Miss Clara A. Wilson, Davenport, Ia.
For *Vice-President*—Miss Charlotte W. Stoddard, Rochester, N. Y.
For *Secretary*—Mr. William Vogel, Cincinnati, O.

The report was unamimously adopted, and the nominees declared elected as officers for the ensuing year.

The department was then adjourned to meet on Thursday afternoon in joint session with the Department of Manual Training.

JANET M. STEVENS,
Secretary pro tem.

PAPERS AND DISCUSSIONS

ART AS AN EDUCATIONAL FACTOR

JAMES L. HUGHES, INSPECTOR OF SCHOOLS, TORONTO, CAN.

Even those who still see no reason for teaching any subject except its economic value are beginning to understand that art is one of the most important of all subjects on the school program. Men are learning very clearly that artistic training in childhood means artistic manufactures in adulthood, when the productive period of life is reached.

The wealthiest nations are those which export manufactured articles, not raw materials. The value of the manufactured article consists chiefly in the character of the transformation made in the raw material by the designer and the workman. The more artistic the designer and the workman can become, the more perfectly they can transform the raw material, the more completely they can unify beauty and utility—the more they increase the value of the manufactured article. The value of the article depends much more on its beauty than its utility. "Art transforms clay beds into gold mines." Dr. Harris has well said: "The great problem in the industry of nations has come to be the æsthetic one, how to give attractive and tasteful forms to productions so as to gain and hold the markets of the world."

Art is, therefore, revealing itself as the most practical of all subjects; as the subject that has most direct influence on the productiveness of individual men and women, on national wealth, and on the elevation of the home in its material conditions.

But the strongest reason for the universal introduction of real art teaching into schools is its educational, not its economic, value. Art is an educational factor, because it gives the child a new power of expression. Individual power develops only by self-expression. Art is the highest form of self-expression. Every time a child is trained to use a new means of expressing its selfhood, a new phase of selfhood is developed, and every other already developing power is increased, both in force and range of application. The varied powers of each individual form an interrelated unity, and each undeveloped power prevents the perfect growth of all other elements of the unity. It is even more grandly true that the development of each new power strengthens and extends the sphere of all interrelated powers. It is, therefore, of the highest importance that educational institutions should afford the best means for stimulating all developments of human power in each individual, in order that he may attain his widest and most complete growth and be most perfectly qualified to understand his relationship and perform his duties to the universal brotherhood. As art appeals to a wide and high range of intellectual and æsthetic powers, it is an essential department of true education.

One of the established principles of education is that each child has a special department of power which is his interest center. This interest center may change at different periods of the child's development, but the essential psychological fact remains the same, that there is always some interest center in each child, which, if aroused and allowed to become the leading element in his executive work, will kindle his whole intellectual and moral nature and stimulate his most energetic efforts in self-expression. No external agency can rouse to the most productive interest. The interest that kindles and defines and accomplishes, that awakes and achieves, must act spontaneously from within the child himself, and it must have appropriate material and opportunity for its stimulation and its activity. With a narrow curriculum many children were never kindled, and they passed thru life "deaf and dumb and blind to a million things;" indifferent, negative beings, instead of energetic and positive, as they should have been.

Interest aroused in the central department of power so fully as to lead to original expression becomes the supreme agency in producing definite and energetic action of the whole being, and therefore one of the chief aims in education should be to find the interest center of each child and provide opportunities for its executive activity.

There are many children whose central life power cannot be fully kindled by mathematics, or science, or history, or literature, or music, who may be aroused to harmonious activity by art. If these children are not allowed to illumine their lives by art study and art expression, the result is restricted and barren lives. One of the most pathetic things in the world is a barren life. No life should be barren. No life can be fully productive unless it yields its best fruit in fullest measure. No life can yield its richest fruitage unless its powers of self-expression have been trained to self-activity. No individual power of self-expression can be trained to its supreme limit of productive activity unless all co-ordinate powers of self-expression have been trained, and especially the central element of highest selfhood.

Art should be a high form of self-expression for *every* child, and it may be the highest form of self-expression for many children ; therefore, all lives must be relatively barren, and some lives pitifully barren, without art training. Every child should have the right of added joy and power and growth that may come to it thru art, but especially those for whom art alone has strongest kindling power.

Mr. Morris says, "Art is for the few." This is a narrow view. It is the limited thought of an artist, not the broad thought of an artistic educator. All partial training is defective. Education without artistic training is partial, because the highest form of self-expression has been omitted. To omit this training restricts *all* lives and dwarfs *some* lives.

What are the educational influences of art in individual development?

Art cultivates the observant powers. Seeing is an act of the mind. Every additional element of artistic thought increases the power of seeing definitely and widely, and especially of seeing beauty and relationships to which we were previously blind. The child who has not been taught the principles of symmetry is blind to the harmony of the beautiful designs in carpet and wall paper and other artistic productions. The child whose color sense has not been trained is not able to recognize the rich harmonies of color in flowers and trees and landscape and sky. The trained ear gets melody unheard by untrained ears. The trained eye sees a thousand beauties in form and color and symmetry that are unseen by untrained eyes. The melody and the beauty exist for all, and are seen by all in proportion as the mind is trained. Oh, the difference between the trained and the untrained!

We see only those things to which we pay attention. Thousands of pictures form themselves on the retina each day which are not seen. We see only those to which the mind attends. The mind can attend to those pictures only that are related to apperceptive centers formed in it by experience and training. Each new apperceptive center increases the range of definite and comprehensive seeing. Each new apperceptive center makes us conscious of beauty or relations of which we were previously unconscious. How different the revelations of a great cathredral to an architect of wide artistic culture and to a man of even broad learning who knows nothing of architecture!

A child has gone to school for years in a city along the same streets. The houses and churches and public buildings have been to him but indefinite masses. He has scarcely been conscious of their forms, or colors, or proportions. He reaches at length a class where he is taught certain elements of historic art, and suddenly he begins to see. Every porch and arch and window and spire is filled with interesting life. He finds design and purpose in each stone. He sees beauty or the lack of it everywhere. He sees the correct and the incorrect, and soon can recognize Egyptian, or Ionic, or Doric, or Corinthian, or Gothic styles.

How much better it would be if all architecture were true! How much higher the silent influence of environment would be if all schools in external construction and interior decoration were correct and harmoniously suggestive!

Culture in seeing power means culture of the mind, not of the eye. True botanical study vastly increases the power to see beauty and harmony and unity and creative design in nature. True art teaching multiplies our power to see the beauty and harmony and unity and creative design in nature and art in all their varied forms.

The power to see increases as the finite mind grows consciously toward the infinite mind. The best work of education is to promote the conscious growth of the finite mind toward the infinite mind. Good art training does this for most children more effectively than any other subject on the school curriculum.

Art trains the reasoning powers. Definite seeing leads to definite thinking. Accurate observation lays the foundation for correct judgment, and comprehensive observation prepares for broader thinking in regard to a greater variety of individual things and their true relationship to each other. A considerable portion of our reasoning depends on conceptions of size, form, color, and relationship; therefore art training, by the cultivation of new and exact apperceptive centers of size, form, color, and relationship, makes a logical preparation for clear thinking.

Art provides the highest opportunities for the culture of the imagination. Real art is not a mere reproduction of beautiful things that have been stored in the memory, nor is its best work the representation of the beautiful in nature. True art is more than this. It is an expression of the highest revelations of a lifetime in new forms in harmony with the individuality of the artist.

The divine element in man—his selfhood—should be trained to mold material things into new and higher forms, to beautify them with more exquisite and more harmonious colors, to decorate them with more attractive and more suggestive designs, and to transform them into more ennobling expressions of the highest spiritual evolution of humanity. But art does not stop here. It deals with the unseen and attemps the interpretation of the infinite. Its grandest work, the highest work humanity can ever do, is the revelation of the most transcendent development of spiritual insight, the expression of progressively unfolding conceptions of God himself in his personality, his attributes, and his loving relationships to the universe and to man.

It is by the transformation of material things, and by the expression of his highest ideals of God, that man aids succeeding generations to broader, purer, higher evolution, and qualifies himself for clearer revelations of beauty and of divinity. Whether art be reproduction, or representation, or transformation, or spiritual revelation, it exercises some form of the imagination, either representative or constructive or creative, and by exercise develops it and qualifies it for fuller, freer activity. Our highest powers are capable of most rapid and most comprehensive development, and all powers grow most rapidly and most fully when used for highest purposes. As art is the highest form of self-expression it necessarily follows that it is one of the most perfect agencies for developing the imagination.

Art develops originality, and qualifies man to aid in increasing human wisdom and power, and in the promotion of human happiness, by the revelation of new thought, new forms of beauty, and new conceptions of æsthetic and spiritual evolution. We should leave the world richer than we find it. Our only possible gift to civilization is some true revelation of our selfhood. The development of original power is therefore the supreme element in education. Original power can be developed only by the exercise of some form of self-expression in constructive invention, oratory, literature, music, or art. Art is certainly one of the highest of these forms, and therefore one of the most productive of original power.

There should be no barren lives, and every life is barren that gives out no new light, or new transforming thought or influence to enrich civilization. No teacher should be satisfied unless the emotion and thought of each child is given out in improved form, full of new life and power in harmony with the child's individuality. It is in this way that the sum of human achievement is increased, human power developed, human happiness promoted, and the certainty of the progressive evolution of humanity established.

We are too willing to be satisfied with high achievement in the power of expression by the child in oral language, written language, music, manual training, and art. Expression alone adds nothing to the sum of human power. Expression is but a preparation for self-expression. It is not even that in the truest sense. Self-expression is not only the desired end of education, but it is the process by which the most comprehensive, the most definite, and the most perfect forms of expression may be acquired. Self-expression is infinitely more productive than expression. Selfhood should never be divorced from expression. The passive forms of expression are little better than the passive forms of accumulation in the development of the child. The selfhood or individuality of the child is his element of divinity. The development of this element of divinity must be accomplished in the same way that every other element of power is developed, by calling it into self-activity. The true function of selfhood is the exercise of originative or creative power. Whenever the creative functions of the child are assumed by the teacher or are left out of consideration altogether the child's development is dwarfed at its most vital center.

No other school work affords such universally attractive opportunities as art for the expression of selfhood and for the revelation of the growing inner life by creative activity in improving and beautifying the conditions of our environment.

Art is of great educative value because it so readily reveals the possession of original power to the child himself. It is a most important epoch in the life of a child when he awakens to a consciousness of independent power. This is the most inspiring moment of a child's experience. The central element in strong character is a positive self-reverence based on a conscious recognition of original power that should be used for humanity. No other school study affords such opportunities as art for the revelation of special power in a child, both to the teacher and to the child himself. The results of a child's original power are more distinctly manifest, more objectively real, in art than in any other subject.

Art should be a part of the education of every child, in order that he may be qualified for the fuller comprehension of the great works of art. All the revelations that have been made to the world's great leaders are stored in literature, music, and art. I am never so conscious of a lack of education as when I stand with a painter before a great picture, or walk with an architect in a grand cathedral. He sees and feels and thinks a thousand things unseen, unfelt, unthought by me. I am relatively blind and unconscious. The things he sees and feels and thinks are recorded in the picture or the cathedral for me quite as much as for him. I cannot see them because I was not trained to see them. It might not have been possible for me to have seen them as clearly as he does, but my whole intellectual and moral life is narrower and weaker because I cannot see them as clearly as I might have learned to see them. Art training brings with it no deadening of the soul. It kindles and inspires and illumines. Oh, how we have blighted individuality and dwarfed intellectual power by some of our teaching in the past, and are blighting them even yet! But art is one of the subjects that awakens and broadens the child while he is gaining power to produce beauty, or to appreciate beauty and emotion and thought as revealed by others. We wisely try to train the race to be capable of comprehending and enjoying and using the emotion and thought that are stored in literature. We should for exactly the same reasons train the race to see and understand and be uplifted by the revelations and records of the varied forms of art in painting, sculpture, and architecture. The fact that we could not all see what Ruskin saw in color or in architecture is no reason why we should not be trained to see as much as we have power to see. Our duty as educators is to kindle the children and cultivate their vital intellectual powers so fully that they may be able to gain as much of culture and of uplift as possible from the elements of culture and uplift to which they must always be deaf and blind unless they are truly trained.

Art has a wide educational value in correlation with other departments of work and study. The vital history of the race is recorded in architecture and sculpture and painting quite as fully as in books. Much that has passed in schools for history is a record of the results of jealousies and rivalries and ambitions of a selfish nature. Architecture and sculpture and painting record great ideals as they have been revealed to succeeding generations and civilizations, and to different nations. Epoch conditions and national characteristics are indelibly recorded in the art productions of eras and of nations. It is quite certain that the boy who studies and draws the various types of architectural elements of different nations will have not only a more awakened intellect than the boy who studies history as it is usually taught, but a more revealing knowledge of the real influence of the nations upon civilization.

Art is the basis of true manual training. All forms of productiveness are degraded when beauty is subordinated to utility, or when utility alone is considered. The richest beauty cannot detract from the highest utility. True beauty cannot lesson utility. If the aim to give more beauty renders any article less useful, then the unity between beauty and utility has been neglected, and a fundamental law of beauty has been violated. Artistic design is one of the most important elements of educative manual training.

Art may also be correlated with geometry and geography and science and literature. Many of the fundamental principles of Euclid are essential in architecture and in the art department of manual training, and these principles learned incidentally as they are wrought out and applied in art are learned more definitely and understood more thoroly than they could be by being committed to memory or even thought out by the most advanced methods of abstract thinking. A boy who draws the homes of people in different climates and of different degrees of civilization, or who sketches the people themselves in characteristic national costumes, or who makes an illustrated map of the world with pictures of the animals found in the different zones, has learned and impressed the facts relating to these departments of geograpy better than by reading or listening to a teacher. Drawing and painting are now universally used in the study of botany, zoölogy, and other departments of natural science. Literature affords one of the best opportunities for the use of art in developing the originality of children, when pupils are allowed to represent in drawing or color their conceptions of the author's thought expressed in language.

Art should have a definite influence in the elevation of the moral nature. One of the most effective lessons I ever learned was taught me by a teacher of art who showed me a collection of Japanese pictures chosen especially as illustrations of color harmonies as developed by those greatest students of color, and who then placed beside the pictures cinders and bark and decaying woods, which perfectly reproduced every color harmony of the artists. It means a great deal to a young life to be made conscious of the fact that even the commonest things that lie unnoticed around us possess some elements of beauty equal to the highest developed conception of the race. The revelation of the beauty and harmony hitherto unrevealed prepares us to believe in the higher evolution of the race in order that it may be capable of comprehending the higher beauty and harmony yet to be revealed. It helps, too, to a clearer understanding of the universe and its Creator to realize that even the most apparently valueless things possess transcendent beauty when we become capable of seeing it.

But the lesson that we are in the midst of beauty, and the training in power to see beauty, great as they are, are not so important as *the habit of searching consciously for the beautiful.* The greatest modern art teachers make alertness to beauty and responsiveness of life to its influence their supreme aims. The true teacher of art says to her pupils: Draw or sketch or paint during next week or next month the flower or the tree or the tower or the landscape that is most beautiful to you. Or she may say: Bring me the pattern or the picture or the object that you like best. At first it is enough to have the choice made, but later the reason for the preference should be given.

Of course it is essential that the choice of each child be recognized as of absolute value to him, and reverently respected by his teacher. If his choice be inferior, his taste cannot be lifted truly to a higher plane by the adoption of another's choice. It is by continued choosing and by conscious delight in what at present appeals to us and satisfies us that we gain a higher power of choice; not by weakly accepting the choice of someone else, consciously or unconsciously. The teacher should simply arrange the pictures or objects for exhibition, without praise or disapproval. She should aim to establish standards of beauty by teaching the fundamental principles of correct taste, but such teaching should always be impersonal. All the pupils may be asked to choose the best specimens brought by their companions, but they should not be asked to include their own in the comparison, and they should report their choice privately to the teacher, not that a summarized vote may be given to the class, but as a revelation to the teacher of the present development of the individuals of her class.

The making of such choices, and the explanations of the reasons for making them, form a very productive intellectual exercise; but the chief value of such training is the development of a persistent tendency to search consciously for the beautiful and true in our environment and conditions. The constant relating of the best outer to the best inner will lead to a conscious purpose to make the best inner become the outer by the joyous desire of not only appreciating the best, but doing it. The habit of choosing the most beautiful in environment will necessarily develop the most beautiful characteristics of the life, and exercise the highest elements of the intellectual and moral nature.

Ideals transform individuals, and ultimately transform national life. Ideals become vital in our lives by consciously choosing them. The child who is trained to choose consciously the most beautiful things in his environment is being trained in the most effective way to consciously adopt true ideals in manhood.

Art has a high moral influence because it tends to lift the race soul above materialism. As Dr. Harris has said, "it arouses emotions and feelings, not appetites." Every working man should feel that he can create and reveal ideals. So will his life be ennobled. Unless the material life can be spiritualized, man's tendency is toward the jungle. The spiritual in literature and music and art has lifted the race slowly toward the divine. This is the only true education.

The time has come when, not the leading few, but all, should become conscious of the exultant thrill of the soul when in conscious relationship to the universal spirit. Art can do more to achieve this grand result than any other subject.

Let us accept Ruskin's philosophy: "If we do not use the faculty of color to discipline a people, they will infallibly use it to corrupt themselves." The artistic power is one of the highest, and therefore is capable of highest development. With grander ideals of liberty and individual power and the possibility of human achievement as we grow toward a truer spiritual emancipation, let us teach the best we know of art to all the children as a basis for a nobler art and a purer individual and national life.

ELEMENTARY PREPARATION IN DRAWING FOR SECONDARY SCHOOLS — WHAT MAY REASONABLY BE EXPECTED

CLARENCE VALENTINE KIRBY, TEACHER OF ART, HIGH SCHOOL, DENVER, COLO.

We, directors and instructors in art education, have reason, I think, to congratulate ourselves, for we are teaching a subject which is more valuable than any other. The best education develops a sound muscular system, which responds to every bidding of a clear brain and well-organized nerve centers; and thru right drawing methods the eye is not only trained to observe accurately and the hand to be the willing servant of the mind's impulses, but the impressions received from nearly every school study, which might otherwise be nebulous and evanescent, are firmly fastened in the mind thru the hand, which is really rooted in the brain, and traces there the fabric of each idea. Thus drawing can make all knowledge partake of the nature of experience. How well we remember our experiences when other learning has flown!

In considering the subject, "Elementary Preparation in Drawing for Secondary Schools," it may be well for us to remind ourselves that our observations from the standpoint of the high school are based upon a small percentage of the entire number who have received elementary instruction, it being generally known that nearly 90 per cent. of the number who started have dropped by the way; persumably these were less equipped than those it is our opportunity to study. Desiring to make this paper the true concensus of opinion, rather than my own weightless criticism, I have communicated with prominent members of our profession from all parts of the country, and shall consider their recommendations in this paper, together with the conditions that have appeared to me. I am aware that, while my position as critic may not make me altogether popular, it is nevertheless easy compared with the efforts earnestly put forth by those criticized, for the reason that it is always easier to pull down than build up.

Drawing has a threefold mission, and it fulfills this mission to the degree that it develops the whole child physically, intellectually, æsthetically, and morally, instead of part of him: First, drawing is an energizing power in forming a disposition and habit of work with mind and body; second, drawing is one of the most valuable instruments for co-ordinating memories and ideas on all subjects; third, drawing ennobles and exalts the mind by acquainting one with the mysteries of nature, and by enabling one to appreciate beauty, and thus bring joy into the most sordid life.

In considering the first mission, it appears of paramount importance, for if there is one thing that the pupil seems to lack upon entering his secondary course it is power, and the thing he possesses most is the fear that handicaps joyous spontaneous expression. In spite of the well-graded courses and attractive exhibitions of supervisors and teachers, who are laboring zealously all over the country, the general sentiment among high-school educators seems to be that pupils are not satisfactorily prepared for advanced work; in fact, it is not uncommon to be obliged to return to first principles. As we view the exhibitions of grammer-grade work, we are impressed with the broad scope of the field under cultivation, and if improvement can be made along any line it might be along the line of the quality of individual power, rather than the quantity of product. But as we are getting away from the weak, tentative touches of old, I believe we are implanting thru the larger, more vigorous efforts of the present, deep in the motor centers of each child's organism, the ability to make in a bold, fearless way the fundamental forms which are the rudiments of all creations in nature and art. The best publishers are urging this larger control today. On blackboard, where fear of error is abolished, the child attains the facility which only large arm movements, in accordance with nature's law, give. This is the way the mechanic draws when he desires to express his thought. It is the way we express our thoughts on the piano and in writing, unconsciously, fearlessly. And yet, some teachers have stood over the child and expected accurate results where there was no control. We have been afraid of spoiling the paper, and so we have spoiled the child. And the child still grasps the pencil as tho it were a crowbar, and his labors show the lack of spontaneity which all agree is the only true expression.

An old axiom defines spontaneity as the soul of art. This power, like every other, comes thru the performance of deeds; deeds that give the hands skill to represent with certainty and precision the shape of a leaf, or the charming lines of the human figure, and inculcate in the organism ideas of uprightness, symmetry, balance, right proportions, and other fundamentals in art instruction. These are the underlying principles in all technical pursuits, and they can be mastered in early years by every child who can write. The favored few endowed with a special talent may soar higher æsthetically, but I like to think of the many less fortunate, who, I believe, can all express themselves in drawing as well as in writing. Goethe tells us that "all art is preceded by a certain mechanical expertness." There will be no failures when we all come to recognize the deeper physiological principles of drawing, which can never fail where there are eyes to see with and hands to do with.

Closer and closer each year have grown the ties between art work and manual work. Art workers are finding that art methods which are not manual training are a delusion; and manual workers are learning that the manual training which is not artistic is a snare. William Morris said: "Drawing is the basis of all the arts." As a product of the art schools, I can say that I wish someone might have helped me at the beginning to lay such a foundation. We thought that art was monopolized by the easel-picture, and we forgot the ennobling influence of the handicrafts and the men they produced—Men like Michael Angelo, Cellini, and Leonardo da Vinci. Gradually we found the art in joinery, in wood-carving, turning, and in other crafts. I am determined always to make a plea for the ones who, thru some misapprehension of the already crowded field, have found themselves unable to cope with the difficulties in the way. Having aimed so high, they have failed, because they were unprepared for the practical. A preparation for the minor arts is the very best preparation for the high arts; for, if a man falls from success in the so-called "high arts," he lands on a solid foundation, for craftsmen are needed, and the progressive ones in our profession have found it out, and we shall soon be rewarded by their labors in this direction.

The growing appreciation of art instruction among superintendents and others in authority has come thru the second mission of drawing as a means of co-ordinating memories and ideas on all subjects, and this has brought about to a large degree a closer relationship of the drawing course to the other school work. From lessons in object drawing, distinct and detached from the other departments of the school, we have made ourselves felt by the means we have at hand to fix in the young mind the impressions the teacher is trying to make in the various school studies. Yet I feel that we have hardly began to show our real strength. Let us put away some of our pet ideas, and if the grade teacher has a geography lesson on Egypt, let the drawing lesson for that day consist of drawing and clay-modeling of mummies, sphinx, obelisks, pyramids, the plan of the country, and the flag in colors, and perhaps these boys and girls will know more geography than some of us do today. We plan each year to acquaint the child with flowers, shells, birds, and animals, but why not help out in botany, geology, zoölogy, illustrate the great events of history, or learn lettering and constructive drawing in geometry? Let the art man and the school man come and reason together.

There is a distinct mental process in memory drawing that is too valuable to be neglected. Tests should frequently be made by removing the model from sight, requiring a drawing from memory, and in every case returning the object that it may be compared with the child's effort, and the differences noted. Of course the child will fail at first, but he will soon acquire the ability to construct proper mental images from material previously seen; and these mental images, by the way, should contain the facts of form, rather than of hair and feathers. In early years it is undoubtedly an error to force too many abstract exercises upon the child; to give him part of a thing when everything indicates that he is concerned only with the whole. A better method encourages the child to illustrate from time to time some circumstance in his own life or environment that directly concerns him; then he has a story that he wants to tell, and he is anxious to learn how to tell it. In one case he has to say something, in the other he has something to say. Let us first create a consciousness of need; then the child is ready to assimilate the instruction which will help him over the difficulty. Our methods should be an unfolding from within, rather than stucco work on the outside.

As for imaginative ability, most children are born with it; that is, with the kind that creates hobgoblins, fairy-tales, and other indefinite conceptions. This is unbridled imagination, but it is not the kind that concerns itself with the intricate workings of a marvelous machine, a splendid building, or an enduring statue. This untrained imagination must first become subjected to the control of the will thru right drawing methods. By accurate observations, the receiving of correct impressions, and the expression of right ideas does the imagination come under the mastery of the mind.

The importance of perspective is urged on all sides, and yet pupils leaving the elementary course seem to have a very vague idea of its principles. I have wondered if we have not confused them with too many principles and too little observation, for we are reminded that altho these principles can be applied to a table or chair, there are none that will foreshorten the human arm or head.

The increased use of color in the grades is most delightful. It not only gives joyful satisfaction to the child, but it conveys a clearer idea of form by helping to distinguish objects and parts of objects one from the other. It has been my experience that high-school pupils are not always aware that yellow and blue colors mixed would produce green. But, thanks to our enterprising publishers, we now have three-color boxes that have excellent quality at a very low price, and are only dangerous as they fall in the hands of teachers with strong tendencies for purple and reddish combinations.

It might be well here to say a word for clay-modeling. While drawing is the representation of a single view, clay-modeling is the *actual construction* of an infinite number of views, and consequently is thoro in its capacity to form concepts that can be worked out in wood or metal. In the art schools it is noticeable that the pupils who model excel in rendering form on a flat surface, and we are all aware of the successful ones, from Michael Angelo to Sir Frederic Leighton and Gerome of our time, who have modeled as well as painted.

As a means of exalting and ennobling the mind, by enabling one to appreciate beauty, our drawing courses are fulfilling their mission. Ruskin said: " Hundreds of people can talk for one who can think, but thousands can think for one who can see." And Emerson exclaims: "We are immersed in beauty, but our eyes have no clear vision." Drawing opens the eye of the understanding to the marvelous message written in every leaf, woven in the architecture of every shell, and painted in the heart of every flower — messages of beauty and grace. The child turns directly to nature for these messages, and it is to be regretted that so often in the past artificial copy-books have been his interpreters, instead of teachers who could both see and do. Children cannot be averaged up like bricks, but the artificial system presupposes the same pecularities in each, and so the child is made from the text-book, when in truth he should be the text-book for us to follow. While I believe that every teacher of drawing should not only be able to draw skillfully and accurately, but be able to teach successfully with only something to draw on and something to draw with, at the same time I appreciate the progressiveness of certain publishers and the factor they have been in raising our courses to the plane they now occupy. Like every other good thing, they fail, not by use, but thru abuse.

In the light of general opinion, it does not seem unreasonable to expect that a pupil upon leaving the grammar grades should have a hand trained to make forms upright, symmetrical, well balanced, right proportioned, and graceful at will. He should understand the simple laws of perspective, and be able to apply them to simple forms. He should be able to arrange his work pleasingly on the surface it is to occupy and letter it neatly. He should have had enough design to understand its fundamental laws of growth, rhythm, balance, and harmony, and to be able to recognize the characteristics of the leading historic styles. Work with brush and color should not be unknown to him. He should be able to reproduce from science and other studies with freedom and certainty. In the use of instruments he should have at least learned the value of accuracy, and he should understand the principle of working drawings.

Now, if these results may reasonably be expected, and yet so often fail, we are led to ask ourselves the reasons, and they are found rather in the prevailing conditions than bad methods. There are two plans: either the grade teacher must be directed by a supervisor, or each subject must be taught by a special teacher. The former plan prevails, and is no doubt better, for the reason that a teacher who has entire charge of a pupil can do more (providing she is wholesome and earnest) in the development of character and good citizenship than the special teacher who comes occasionally. The unfortunate part of it is that the grade teacher is her own lawyer, and she asserts with emphasis that she never could draw, "not even a straight line." In one of our largest cities, the supervisor began three years ago to put the teachers thru a systematic course. Altho it was necessary to take some school drawing hours for this departure, the results, I have learned, far exceeded the anticipation. If there is one criticism that can be laid at the door of supervisors and directors, it is that they endeavor to cultivate too large a field. The actual instruction for the most part falls to the grade teacher, whose training is often so insufficient that she is not aware of the many poor specimens that slip thru her fingers. But let us not be discouraged by these failures. Let us rather gain hope thru our success. Let us look forward to the time when the pupils who are receiving the benefits of our present methods become the teachers of the future, and teaching becomes a profession instead of a convenience; then will our teachers express their thoughts in drawing so as to win the admiration and regard of their pupils. And the latter will have, thru right drawing methods, such well-disciplined eyes and hands that they too will express their ideas in drawing as readily as they do in writing or talking. Let us inculcate such power in the young that the mind may be left free to think and plan while the hand moves with automatic facility to accomplish the heart's desires. Then we will not be modeling every boy after our own pattern, but we will be helping him grow to be all to which he could possibly aspire.

REPORT OF THE COMMITTEE OF TEN ON ELEMENTARY ART EDUCATION

APPOINTED AT THE MEETING OF THE ART DEPARTMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION JULY 8, 1898. WITH APPENDICES AND REMARKS OF THE INDIVIDUAL MEMBERS OF THE COMMITTEE

ANALYSIS OF THE REPORT

Preface.
Presentation of Report.
Action of the Art Department Constituting the Committee.
Names of the Committee.

Some General Reflections.
What is Art Education?
Limitations of the Subject.
Form as the Basis of the Space Arts.
    I. An Infinite Number of Apparent or Accidental Forms.
    II. Only one Real Tangible or Potentially Tangible Form.
  The Two Phases of Appearances.
    A. The Mere Æsthetic Appearance or the Beauty of an Object or of a Scene.
    B. The Pictorial Appearance, or the Picture of an Object.
  The Two Phases of Real Shape or Form.
    C. The Real Shape in Space of an Object Having Three Dimensions.
    D. The Real Shape in Space of the Planes, Sections, or Edges of an Object.
Suggested Outline of Course of Study for Graded Schools.
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  Outline by Groups—Group I.
    Group II.
Appendix A.
Appendix B.
Appendix C.

PREFACE

Of what practical use is the work of the Committee on Elementary Art Education? On reading the following report for the first time some may object to the abstract or philosophical form in which some parts of it are expressed.

The fact that the committee was required to determine the basis, or bases, of a course of study in elementary art education necessitates somewhat the form of expression of the report, since these principles cannot be clearly stated except in exact language. The manner of expression must be somewhat abstract in order to include the different concrete elements in the minds of different individuals. If expressed in the concrete form of any one individual's thought, such expression would exclude to a greater or less extent the favorite forms of other individuals. Hence the committee feels that a general or abstract form of language gives greater liberty to the individual to read into it his own interpretation, and at the same time secures greater unity in the result of its deliberations.

Its should be further stated that the committee has not attempted to make out a course of study that would completely fit the conditions found in any particular school without a single modification. It has endeavored only to lay down basic principles and a general outline which could easily be modified to suit the particular circumstances of any ordinary school.

The report, then, appeals to superintendents, boards of education, and general educators, rather than to the class teacher. Many class teachers will no doubt be interested in it, but there are also many excellent class teachers who are not conscious of the underlying principles of the course of study they are helping in an efficient manner to carry out, and for this reason they may not care to study it.

REPORT OF THE COMMITTEE OF TEN ON ELEMENTARY ART EDUCATION

PRESENTED TO THE ART DEPARTMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION AT MINNEAPOLIS, MINN., JULY 9, 1902, BY THE CHAIRMAN OF THE COMMITTEE, LANGDON S. THOMPSON

The following resolution was passed by the Art Department of the National Educational Association July 8, 1898, at Washington, D. C.:

Resolved, That a committee of ten shall be appointed by the president of the Art Department of the National Educational Association, and that the president shall be one member thereof, for two purposes:

1. To determine, in the light of psychology, environment, and experience, a proper basis, or bases, of a course of study in elementary art education, including form study, manual training, drawing, and the study of art works.

2. To outline, in a general way, such a course of study for the common schools.

To the Art Department of the National Educational Association:

In accordance with the foregoing resolution, the undersigned Committee of Ten on Elementary Art Education, appointed at the meeting of the Art Department of the National Educational Association at Washington, D. C., July 8, 1898, has the honor to submit the following report, pointing out the fundamental principles of Elementary Art Education, and suggesting a general outline for a course of study for the common schools.

LANGDON S. THOMPSON, *Chairman*,
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SOME GENERAL REFLECTIONS

Everyone who pursues the vocation of a teacher for any considerable length of time obeys principles, either consciously or unconsciously. Man, as a rational being, must think or reason concerning that which he does. Thinkers demand definitions, clear statements; and hence reasoning on the basis of right perceptions and true conceptions must result in the discovery of more or less truth, which, when stated in language, we call principles. The resolutions above quoted assume that there are principles to be observed in elementary art education which may be determined. It has been the business of your committee to determine and state such principles, and, in accord with these principles, to suggest a general outline for a course of study.

Here, as in all courses of study, purpose or aim must be the organizing element. The ultimate aim must determine general principles and methods of procedure, while the immediate aim, at any particular stage of advancement, must determine particular methods and devices.

The general aim of elementary art education is the same as of all phases of education. Of the ultimate end of education we may safely look to ethics and philosophy for a statement. It is, in short, the grand march, or evolution, or progressive development of the soul (1) *out of* the slavery of mere sense perception of thing and environment, the supposition of *non-relation*, (2) *into* and *thru* the category of the understanding and the reason, the supposition of *universal relation*, (3) *to* the freedom of pure thought, the supposition of *self-relation*. Hence all fragments, parts, or departments of education should have in view and should tend toward this development of the self-active soul.

The particular scope of elementary art education is the field of the sensibilities, or æsthetics, the leading forth of the emotions from mere capricious spontaneity to the serenity of the habitual admiration and reverence for all ideal and æsthetic expression in sensuous matter, and for the æsthetic realization of the self-active, free spirit of man and of God.

The various studies, or sciences, used as stimuli or food for the development or education of the soul may be arranged in such general groups as follows: (1) Those derived from the investigation of the inorganic world, giving rise to mathematics and the physical sciences; (2) those derived from the organic world, giving rise to the biological sciences; (3) those derived from the social world, giving rise to the sociological sciences; (4) those derived from the spiritual world, giving rise to the metaphysical sciences or philosophy.

Space-art education, whether elementary or advanced, is not confined to any one of these groups. So far as art education deals with sensuous matter, or with form or space, it finds its basic principles in the first group, in physics, chemistry, or in geometry, which last is *par excellence* the science of form and space. Here is clearly indicated the proper use of geometry and geometrical forms.

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[1] Resigned before report was completed.

The different forms assumed by the fine arts, coming under the consideration of your committee, as ceramics, architecture, sculpture, and painting, find their sensuous matter or *material* for embodiment in the first and the second groups. Here we see the necessity for exercises in clay-modeling, in wood-work, and other hard material, in fact for the whole field of manual training, in order that the pupils may get some power of manipulation and self-realization in matter.

The particular *forms* of expression that works of art will probably take at any period are determined by developments in the social world, or in the third group. Here is pointed out the breadth of our proposed course of study. It must include the elements of ceramics, architecture, sculpture, painting, decorative design, and something of their history.

The ultimate end of art education, as previously stated, is best explained in the fourth group, in the realm of self-activity, or philosophy. Here we have authority for whatever of self-realization and culture we may find practicable.

WHAT, THEN, IS ART EDUCATION?

Before we can specifically point out the nature or the purpose of art education it will be necessary to inquire into the nature of art itself.

And, first, as to what it is not. It is not a mere recreation of the mind or soul. It is much more than a recreation. Art is an expression of the profoundest interests of human nature and of the most comprehensive truths of the spirit. But art is not religion, nor can it take the place of religion, altho it has power to soften human manners, by giving to man a vision of his ideal self, and indicating what he ought to be. When he thus sees himself objectified in art he is led to dispassionate reflection which enables him to discover higher possibilities for himself. Thus, indirectly at least, art may be said to have a proper moral end. But neither in its form nor in its content is it the highest manifestation or the last and absolute expression by which the true and the good are revealed to the human spirit.

Art is not a mere imitation of nature, altho it is perfectly natural in that it has its origin in the nature of man, and in that it uses natural elements thru which to express its ideals. Art is one of the results of the self-activity of man on his environment, one of the results of his self-consciousness. It appeals both to the senses and to the intellect, its object being something between the sensible and the rational; but in its use of images it appeals more directly to the imagination, as well as by its incarnation in a sensible form.

Art is not merely the beautiful. Beauty is not all of art, altho it is the most pleasing element and one of the most important elements in it. Beauty is not the merely useful, nor does it have its origin in the association of ideas. Beauty is the revelation of the free spirit in a sensible form, and is both objective and subjective.

The real labor of everyday life is serious; it is work rather than play, while the real work of art is serene. Tears and sorrow often belong to the real work-a-day life, in conflicts between sense and duty, while joy properly belongs to art, the field of the ideal, where the spirit works with perfect freedom, where both sense and will may have their way, and where we may do as we like and no mischief will come of it. This is the gladsome kingdom of the beautiful, where man may put forth his supremest creative powers in self-realization. The mission of art, then, is to represent, under sensible forms, the free development of ideal life, and especially of ideal spiritual life.

LIMITATIONS OF THE SUBJECT

In general, the word "art" is a very comprehensive term, including many different forms of expression. All of these various forms, however, must find their expression in *space*, or in *time*, or in both; hence all art subjects may be loosely divided into two general groups, which may be called the *space arts* and the *time arts*. Those of the first group, requiring space in which to manifest themselves, appeal for recognition to the *eye* and to the *touch;* while those of the second group, requiring time in which to manifest themselves, appeal more directly to the *ear*. The principal arts in the first group are architecture, ceramics, sculpture, and painting, while those in the second group are music and poetry.

The resolutions of the Art Department limit your committee to the space arts, form study, drawing, architecture, ceramics, sculpture, painting, etc., all of which must concern themselves in their sensuous expression with *form* or *shape*.

FORM AS THE BASIS OF THE SPACE ARTS

These words, "form" and "shape," have several meanings when applied to actually or potentially visible objects. There are two of these meanings, however, that must be clearly understood, defined, and distinguished, if we would avoid interminable confusion. These two meanings of "form" and "shape" may be distinguished as follows: Every visible object, or potentially visible one, has, or may have —

I. AN INFINITE NUMBER OF APPARENT OR ACCIDENTAL FORMS

These apparent forms, aspects, or appearances can be known or recognized only thru sight. They are visual percepts pure and simple, created by the self-activity of the observer. The truth of the above becomes evident if one looks at any common object from many different standpoints. Every change in the position of the eye or in the position of the object, no matter how slight these changes may be, makes a different impression on the retina of the eye and causes a different contour or form to appear to the mind. But notwithstanding these infinite apparent forms, every visible object, as a definite unified body in space, has and can have—

II. ONLY ONE REAL TANGIBLE OR POTENTIALLY TANGIBLE SHAPE

This tangible or individual shape of an object is the result of its extension in space, and is never seen thru the physical eye as it really is in space. For the mind, it only exists as a mental concept. So long as the extensions of a material object remain the same and the object retains its individuality as such, it can have but one real shape in space.

The above two meanings (I. and II.) are entirely different, and the failure to discriminate these meanings and to keep them separate in the mind has caused the teachings of many writers to be a mere play upon words. Some writers and teachers frequently use the same unqualified word "form" in both senses perhaps in a single paragraph or even in the same sentence, thus confusing readers and pupils.

Note carefully the distinctions.—The first is the conception of a visual percept pure and simple; the second is a conception of the mind made up from visual and tactual percepts. The first form can be seen *only* because only the sense of sight can perceive it; the second can *never* be seen by the eye of sense, because it is an elaboration of the mind, and cannot be imaged; it can only be defined. The first, by the observer's long experience, has taken on the attitude of suggesting the second to the mind; but the second, by itself, never intimates any one of the innumerable aspects of the first except thru the return process of scientific perspective. The first pertains to line only, or to colored surface, or to both; the second pertains to line, to colored surface, and to solidity. The first gives us the beauties and the pictures of vision; the second gives us ideals for making, modeling, architecture, sculpture, and manufacturing in real materials. The first can have but one or two dimensions; while the second may have one, two, or three dimensions.

THE TWO PHASES OF APPEARANCES

Space art recognizes two phases of appearances in objects: (A) the æsthetic results of vision, or the apprehension of pleasing space and color relations through the eye; and (B) the images or appearances themselves, derived from objects thru visions. These will be explained in order as follows:

A. THE MERE ÆSTHETIC APPEARANCE, OR THE BEAUTY OF AN OBJECT OR OF A SCENE

The beauty that is apprehended thru the eye, or a beautiful visual percept (and we are speaking of no other kind at present, such as may be apprehended thru touch or hearing, etc.), is a matter of appearance, something to be seen only, something pertaining to pleasing space or color relations in outline or as colored surface, but not to solidity as such, because the appearanae of solidity is not solidity itself.

Most objects appear more pleasing from some points of view than from others, because by changing our point of view we may change the space and the color relations in our field of vision, which field is always apprehended on the retina of the eye as colored surface rather than as solidity. If the beauty pertained to solidity as such, it could not be apprehended by the eye alone.

The beauty of objects may consist (*a*) in their color (analogy, contrast, harmony), (*b*) in their light-and-dark (value, proportion, space division), (*c*) or in the composition of line, light-and-dark, and color (regularity, variety, unity).

In general these ideas of color, light-and-dark, and composition may have their outward expression in the pleasing arrangement of natural or other objects in the field of vision, in a scene, or in given geometrical spaces, but more especially in the division of surfaces into pleasing proportions for ornamental purposes. Of this specific form of expression there are two principal methods of composing an ornamental design, the analytic and the synthetic.

As the practical, concrete expression of the preceding ideas, we have the ***historical ornament*** of all ages and countries of the world and modern ***decorative design***. The scientific outcome of this study of the beautiful should give us the science of ***æsthetics***, or the science of beauty.

How expressed.—Visual beauty is its own most complete expression. It exists for itself and expresses only itself. It is its own ***raison d'etre***. Its images as seen by the mind thru the eye may be imitated on a flat surface by drawing, painting, printing, weaving, or other method of transcribing.

The second phase of appearances may be stated thus:

B. THE PICTORIAL APPEARANCE, OR THE PICTURE OF AN OBJECT

Under B we must remember that the graphic representation of a visual percept of an object gives us a picture, an appearance, a visual image; not the object as it is in space, only one of its innumerable visual aspects. The purpose of a picture may be (1) to inform the understanding, or to teach something; (2) to arouse the feelings, and thus to incite to action; or (3) simply to give pleasure in the presentation of the beautiful. When "(3)" is the purpose, the picture is not considered as a visual image of some real object, and in truth it belongs under the head of A instead of B.

The study and the record by drawing of our visual percepts, or images of objects, if done to illustrate general school work, may be called "illustrative drawing;" if done for the purpose of learning the principles and their applications to the drawing of appearances, we call the process "model and object drawing," "pictorial drawing," or "free-hand perspective." The scientific study and the representation of appearances yield us the science of perspective, both linear and aërial. In the execution of a pictorial drawing there may be one, two, or three stages: (*a*) outline, (*b*) light-and-dark, and (*c*) color.

How expressed.—Under phase B, the picture is the only complete and perfect expression, or outward realization, of a visual image, or percept. (Oral or written language, modeling, making, or working drawing cannot form a substitute, nor can they give any direct help.)

See Appendix A.

THE TWO PHASES OF REAL SHAPE OR FORM

We may distinguish two phases of real shape or form, as we direct our attention to the real shape of an object as a whole, or as a solid, or to the real shape of its various planes, sections, and edges, and their relations to one another. The first phase may be stated as follows:

C. THE REAL SHAPE IN SPACE OF AN OBJECT HAVING THREE DIMENSIONS

The study and the analysis of the real shapes of objects may reveal to us certain fundamental, ideal, or type solids which are useful as units of comparison in dealing with the concrete forms of all objects. For our subject the following is a convenient classification of artificial objects: (1) Regular geometrical solids, or type solids; (2) objects of ordinary manufacture and building construction; and (3) objects of art. The study of the first group gives us the science of geometry; of the second, the principles of building construction; of the third, the laws of ceramics, architecture, sculpture, and all plastic art in general.

How expressed.— The only really complete and logical expression for the real tangible forms of these three-dimension objects is in solidity, in some material having three dimensions. (No vocal or written language can portray solidity directly. No pictorial, conventional, mechanical, or other kind of drawing can do it.) Remembering that pictorial drawing and pictorial painting of any kind can show us appearances only, not real three-dimension forms, it then becomes evident that mechanical drawings are only conventional symbols.

The second phase of real shape or form may be stated as follows:

D. THE REAL SHAPE IN SPACE OF THE PLANES, SECTIONS, OR EDGES OF AN OBJECT

Under D the objects to be considered are mostly artificial, and their planes may be classified as follows:

(1) *Faces,* horizontal or vertical; (2) *sections,* cross and longitudinal; and (3) *the single-plane surface,* showing all the faces of an object arranged and joined in one plane. All these planes with their edges may be studied as concepts derived from visual and tactual percepts. When we study the edges, faces, sections, or surfaces of type solids and other regular objects, as buildings, furniture, machines, etc., and record by conventional drawing their real one-or-two-dimension forms (not our visual percepts of them), we call the results, (*a*) plans or elevations, (*b*) sections, (*c*) developments, or patterns.

How expressed.— It will thus be seen that the only adequate and true expression for our concepts of edges, faces, sections, and developments, composed from visual and tactual percepts, is in so-called "mechanical," or "working" drawing. Such drawings do not show us objects as they really are in space; they are only conventional representations of the separate and detached edges or faces, with their relations conventionally indicated The synthesis of these separate concepts forms in the mind a whole or a unified concept, which may be realized only by a constructed object in space.

The basis for the conventional representations of these mental conceptions formed in the mind, or of the corresponding objects in space, is orthographic projection, a branch of descriptive geometry, with its practical departments of architectural, machine, and engineering drawing.

See Appendix B.

[NOTE.—Working or mechanical drawing is the most abstract and conventional of all drawing that deserves the name of drawing. It is a mere symbolical language, making no attempt to show the external unity of the object suggested. Pictorial drawing is a natural language that can be read at sight, showing the unity of the object in the drawing itself, while working drawing is an artificial or conventional language, suggesting the unity of the object in the mind as a conception, and requiring a process of reasoning and imagination to be fully interpreted.]

To some art teachers the preceding analysis of form may appear too formal, and, even if true, unnecessary. The committee has tried to make it express the truth, and if they have succeeded they cannot but think it of vital importance in determining a course of study.

To know the psychological relations of the different kinds of drawing and the different branches of art to one another, and to education in general, would certainly help to give confidence and stability to our procedure in this important work. To want of such knowledge the committee believes is to be attributed in part the feverishness and vacillation of many teachers, educators, and directors of art education. They have become dissatisfied with what they have been doing, many perhaps rightly so, and instead of endeavoring to know, to formulate, and to apply the educational principles well known to practical as well as to philosophical educators, they ignore the thought and experience of the past and suppose the path of progress to lie in the direction of further experimentation, sometimes of the most random character.

The committee is aware that a breaking away from, or rather an earnest questioning of, previous processes and supposed principles is desirable as a step forward; yet it also knows that after this self-estrangement there must come the return process in which the old has not been cast aside, but taken up into a higher unity with the new.

When the committee is further reminded of the help that has come to practical teaching and to the adoption of rational courses of study from such philosophers as Kant, Hegel, Herbart, Rosenkranz, Spencer, and Harris, it is inclined to ask if it is not about time that some effort be made to unify and to arrange in somewhat scientific order what is known about modern elementary art education.

If the present work of the committee should incite the leading thinkers in our chosen line of study to seriously discuss their report for the purpose of finding the truth or falsity of its theses, it believes much good may yet come from its efforts.

SUGGESTED OUTLINE OF COURSE OF INSTRUCTION IN ELEMENTARY ART EDUCATION FOR GRADED SCHOOLS

INTRODUCTORY

For the last few years elementary art courses have been passing thru a transition period, and at the present time there is still much confusion in the minds of even the most thoughtful educators. The old unifying principles have been somewhat discounted and the new are not yet well established. In such an unsettled condition there are those who, having seen the abuses in the almost exclusive use of geometrical solids and mechanical methods in vogue some ten or fifteen years ago, are now inclined to go to the other extreme and throw out these so-called type solids altogether, and so much has been said in a plausible manner against the *abuses* of such solids that some teachers in high places have been tempted to discard even their proper use.

Again, the rapid growth of the fascinating exercises called "nature study," in general education, and the pleasing and advantageous use of drawing in connection therewith, have tempted many to say that such work should be the basis of the course of study in drawing.

Again, others have looked with confident hope to child study and the investigation of children's spontaneous drawings for assistance in making out a natural course of exercises in drawing and elementary art.

One or two members of the committee have taken a prominent part in the investigation and study of children's drawings, and its members are all familiar with what has been done in this line. While the results are sometimes very interesting as knowledge or information, which is very valuable in individual cases, it is perhaps unfortunate that the professional investigator is very seldom in a position to put into practice what he thinks he has discovered, in a system of schools where the classes are large, the teachers inexperienced, and where practical, visible results are demanded by school authorities. Again, in this connection it must be noted that professional investigators are no more agreed among themselves as to the best methods of procedure than those who have approached the subject thru actual experience in the schoolroom. In view of these considerations, perhaps none but the most enthusiastic devotees of child study thru the spontaneous drawings of children would claim that we have received any revolutionary ideas as yet from this source.

The committee, however, is inclined to be conservative in suggesting a moderate use of the type solids, while acknowledging the value of nature study as a practical application of object drawing and as furnishing indispensable material for ornamental design, and giving due credit to child study for emphasizing the importance of conceptual and imaginative drawing at the beginning of the course.

In general, then, the committee wishes to say that it has tried to conserve the good of the past and to welcome the aid of the present and the future, believing that those who discard the type solids now will call them back again later on, and those who now depend on nature study so confidently will yet see their need of more regular and definite forms from which to derive general principles, and, still further, that the child-study adherents will yet see that it is too soon to throw aside what has already been successfully done in elementary art education for many years in the past.

The committee is not so presumptuous as to expect the entire approval of all who read their report, and they only suggest this general outline, hoping it will afford diversified and verified topics and material from which selections can be made conforming to any circumstances likely to be met in our public or private schools.

A proper course of instruction in elementary art education for graded schools should provide for the development of the self-activity, the spontaneity of the pupils on the one side, and for the restraint, the guidance, or the discipline of this self-activity on the other side. Unrestrained spontaneity is one-sided and in the end self-destructive by exhaustion. Too much guidance or restraint is also one-sided and self-destructive by repression. The true educator understands and acts on the principle that both self-activity and guidance are necessary elements in the education of self-determining human beings, and that a well-balanced course of instruction must provide for the harmonious combination of these elements.

In accordance with this principle it would seem that a model course of instruction in elementary art should provide in some degree such exercises as the following for developing self-activity: (*a*) A series of free hand and arm movement exercises; (*b*) exercises in invention and composition; (*c*) exercises in free-hand brush and color drawing; (*d*) illustrative sketching in connection with nature study, geography, and history, stories read or heard, and literature; (*e*) exercises in clay-modeling and free paper cutting with scissors; (*f*) exercises in drawing animals and the human figure in various attitudes of activity.

For developing the guidance of self-activity, so as to prevent waste and dissipation of energy, there must be exercises of definite form, size, and position by which the children shall learn the conventionalities of form expression as established by the best usage. Such exercises as the following will be found useful for this purpose: (*a*) Exercises in drawing from well-executed copy, conventional forms, and historical ornament; (*b*) drawing from memory and dictation; (*c*) drawing from type solids and other regular objects, as well as the careful drawing of natural objects based on them; (*d*) mechanical or working drawing; (*e*) decorative design.

With these principles and general exercises in view, the following details are suggested by grades or years. It is not meant that every school shall be required to carry out every detail here laid down. Something, perhaps much, must always be left to the judgment of teachers, their qualifications in drawing and other art work, the environment of the school, and to the apparatus and materials at hand. Care, however, should be taken to select work from the two series of general exercises presented above, so as to keep about an even balance between the two, neither emphasizing nor slighting too much the self-active spontaneity or the conservative force of constraint or guidance.

In carrying out this or any other course of art instruction, the order of procedure at each step, lesson, or topic should be "observe, think, then express." Again, after this first expression, compare the results with the previous and with renewed observations and additional thinking, so as to be able to correct errors. Compare again, and again.

Time devoted to drawing.—In some schools not more than one hour per week is given to drawing. The committee thinks this is too little time in which to do satisfactory work, but one hour per week faithfully given to this subject is much better than none. In other schools as much as three hours or more per week for drawing and manual training are allowed. This is none too much time for the best results in both subjects. The committee, however, believes that two hours per week for drawing alone ought to produce excellent results. The average time thruout the United States is not more than one hour and a half per week, which is not fully satisfactory.[1]

OUTLINE BY SCHOOL YEARS OR GRADES

FIRST YEAR

Form study and modeling.—Study and model in clay the sphere, the cube, and the isometric cylinder (a cylinder of equal dimensions), and some natural objects based on them, as cherries, grapes, peaches, oranges, nuts, apples, etc. Study the shapes, the directions, and the relations of the edges and the faces of the cube with one another. If preferred, the natural objects may be modeled before taking up the geometrical forms.

Æsthetic study and drawing.—Lay leaves, seeds, sticks, and circular and square tablets for borders, illustrating the idea of *simple repetition.* Place dots in symmetrical positions and draw simple symmetrical figures. Use the brush and ink, or brush and color, in free-hand work in border making. Study pictures, such as the "Pet Bird," by Meyer von Bremen, "Pony and Dogs," by Barber, or "An Interesting Family," by Carter.

Distinguish and name the six standard leading type or positive colors, as standard red (or positive red), standard orange, standard yellow, standard green, standard blue, standard violet. Ornament with color or by drawing the faces of the cube made under the head of *Working drawing.*

Pictorial drawing.—In all kinds of drawing thruout the course, give *special attention* to the shape and size and color of the paper and to the arrangement of drawings upon it, so as to produce a well-balanced and pleasing effect.

(*a*) *Imaginative drawing.*—Draw imaginative land and water views, representing simple visual appearances of the land, trees, water, and sky; as a hill with a house, a road, a pathway, or trees; a boat on the water, as a lake or the ocean; a rainstorm, a snowstorm, or a snow scene; the sun rising over the water or the hills; what can be seen thru a window; etc. Illustrate fables, simple stories, or myths, one scene at a time, told or read by the teacher.

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[1] Those educators who think too much prominence is given to form study and modeling in this suggested outline can easily leave out a portion or all of it, especially in the grammar grades.

(*b*) *Sight drawing.*—Draw with the brush or pencil the appearances or direct views of a cake, a cookie, a coin, a plate, the sun, moon, ball, soap bubbles, balloon, fruits, grasses, grains, leaves, and other natural objects based on the sphere, cube, or isometrical cylinder. Use drawing freely in all nature-study work. Use very freely large and small free hand and arm movement exercises based on circles, squares, and long, straight lines. Frequently draw appearances from memory. Many of the above drawings may be executed in mass treatment.

Working or structural drawing.—Learn definite distances from one inch up to four inches, by measurement first, and the unaided eye later. Draw a pattern for a two-inch cube, by measurement and ruler, and construct it in cardboard. In designing, draw around the sticks, seeds, or tablets used as units. Cut free-hand, with scissors from paper, the faces of the sphere, the cube, and the isometric cylinder mentioned under *Form study and modeling*, and also the forms of weather signals, toys, lanterns, boats, birds, other animals, and persons in interesting attitudes.

SECOND YEAR

Form study and modeling.—Review the solids of the first year. Study and model in clay the hemisphere, the prolate spheroid, the oblong-square prism, and the oblong cylinder (a cylinder whose axis is longer than its diameter), and some natural objects based on them, as bowls, hats, lemons, plums, melons, pecans, potatoes, peanuts, birds, other animals, drums, spools, etc. Study the shapes, the directions, and the relations to one another of the edges and the faces of the oblong-square prism and the oblong cylinder. If preferred, take up the natural objects before the artificial ones.

Æsthetic study and drawing.—Lay leaves, seeds, and circular, square, and elliptical tablets for borders and rosette forms, to illustrate the ideas of *alternate and radiate repetition*. Continue the drawing of symmetrical figures. Use the brush in free-hand border making. Study pictures, such as "A Fascinating Tale," by Madame Ronner, "Pussy and Family," by Reichert, "Angels' Heads," by Sir Joshua Reynolds, and "Dignity and Impudence," by Landseer.

Review previous color study and distinguish and name six intermediate spectrum hues, as orange-red, red-orange, yellow-orange, orange-yellow, green-yellow, and yellow-green, with their tints and shades. Ornament with color or by suitable drawings the faces of the square prisms constructed under the head of *Working drawing*. For this purpose practice the division of squares by spots, lines, or bands, so as to produce pleasing effects.

Pictorial drawing. (*a*) *Imaginative drawing.*—This will be similar to that described in the preceding grade. Only the simplest elements of natural scenery are to be attempted. The different seasons of the year may be illustrated. Also, calendars may be drawn illustrating the different months.

(*b*) *Sight drawing.*—Draw with the brush, in ink or color, the pencil, the pen, or crayon, sedges, grasses, leaves, and objects based on the circle, sphere, hemisphere, prolate spheroid, the oblong-square prism, and the oblong cylinder, as clock face, jockey cap, umbrella. Use drawing in all nature study, whether of animals or plants, and for illustrating fables, simple stories, as "Jack and Jill," myths, or fairy tales of not more than two scenes, read or told by the teacher. Use very freely large and small free hand and arm movement exercises based on squares, oblongs, and circles. Draw appearances frequently from memory.

Working drawing.—Learn the distances one-half and one-quarter inch, and from one to twelve inches from a scale or ruler. Draw by ruler and measurement the shapes of the faces of the solids studied, and also the shapes of common objects having no appreciable thickness, based on these faces. Draw a pattern mechanically for the square previously studied and construct it in cardboard. Draw around the tablets or other units used in designing borders, rosettes, or all-over patterns. Cut with scissors, free-hand, from paper, the faces of the prolate spheroid, the oblong square prism, and the oblong cylinder mentioned under the head of *Form study and modeling*, also umbrellas, boxes, toys, wagons, wheelbarrows, vegetables, fruits, and animals.

THIRD YEAR

Form study and modeling.—Review rapidly the solids of the first and the second years. Study and model in clay the oblate spheroid, the square plinth, and the circular plinth, and some natural and artificial objects based on them, as lemons, potatoes, turnips, tomatoes, pumpkins, squashes, melons, onions, square and circular boxes, toys, etc. Study the shapes, the directions, and the relations to one another of the edges and the faces of the square plinth and the circular plinth. As usual, natural objects may be taken up first if so desired.

Æsthetic study and drawing.—Lay tablet forms for borders, rosettes, and all-over patterns, to illustrate repetition in a line, around a center, and in all directions. Continue the drawing of symmetrical figures, as rosettes and shields, from copy. Use the brush in free-hand ornamental work and in the drawing of plants or animals in circles, so as to result in pleasing space divisions. Study pictures, such as "Can't You Talk," by Holmes, "School's Out," by Geoffroy, "Baby Stuart," by Van Dyke, or "Lending a Hand," by Renouf.

Review rapidly all previous color study and distinguish and name six more intermediate spectrum hues, as violet-red, red-violet, blue-violet, violet-blue, green-blue, blue-green, with their tints and shades. Ornament with brush and color, or by suitable drawings, the faces of the square plinth and the circular plinth constructed under the head of *Working drawing*. Use the method of radiation from a center for the pleasing division of squares, circles, and oblongs.

Pictorial drawing.—Draw with the brush, the pencil, the pen, or the crayon, grasses, leaves, shells, and other objects based on the lens, the equilateral triangle, and the ellipse. Use sight drawing in all nature study, whether of animals or plants, and imaginative drawing for illustrating sports and pastimes of the seasons, the seashore, or the country where the pupil has been, autumn and winter pastimes, as fishing, hunting, nutting, coasting, skating, a sunset scene, fables, simple stories, myths, or fairy tales of not more than three scenes, read or told by the teacher. Use very freely large and small free hand and arm movement exercises based on circles, squares, oblongs, and ellipses. Draw appearances frequently from memory, also in mass, from some child posed before the class in interesting attitudes.

Working drawing.—Learn large distances, as foot, yard, etc., and use them in drawing the shape of a door, a window, or the schoolroom. Draw mechanically the shapes of the faces of the plinths studied and the shapes of common objects based on their faces; draw the circle, the square, the oblong, and also the lens. Draw around the tablets used as units in decorative design. Cut from paper the faces of the solids studied under the head of *Form study and modeling;* also cut out fruits, animals, etc.

FOURTH YEAR

Form study and modeling.—Review very rapidly the solids of the first three years. Study and model in clay the ovoid, the square pyramid, and the cone, and the common objects, natural and artificial, based on them. Study the shapes, the directions, and the relations to one another of the edges and the faces of the square pyramid and the cone.

Æsthetic study and drawing.—Lay more complicated conventional tablet forms for borders, rosettes, and all-over patterns, reviewing the ideas of simple repetition, alternate repetition, radiate repetition, and all-over repetition. Continue to draw symmetrical curved-line figures, as rosettes and conventional forms, more difficult of execution. Use the brush with color in ornamental work. Study pictures, such as "The Song of the Lark," by Breton, "Lions at Home," by Rosa Bonheur, "The Balloon," by Dupre, or "The

Sower," by Millet. Review rapidly all previous color study and learn to lay with colored tablets or draw with brush and color, or colored pencils, a "scale of standard colors," a "scale of spectrum hues," or a "scale of hues" and a "scale of tones." Make simple designs for a paling, or an iron fence, gate, grating, or grille, plaids, napkins, tablecloths, to illustrate the pleasing division of spaces by lines, bars, or bands. Ornament with brush and color or by drawings the faces of the square pyramid and the cone mentioned under the head of *Working drawing.*

Pictorial Drawing.—Draw with the brush and color, the pencil, the pen, or the crayon, grasses, leaves, flowers, shells, fruit, and objects, natural and artificial, based on the ovoid, the cone, the oval, the triangle, the spiral, and the reversed curves. Use drawing in all nature study, whether of animals or plants, and for illustrating simple stories from literature and history read or told by the teacher. Use very freely large and small free hand and arm movement exercises, based on lenses, ovals, triangles, spirals, and reversed curves. Draw appearances frequently from memory, and draw in mass from children posed in interesting attitudes before the class. Continue imaginative drawing as in previous grades.

Working drawing.—Review the study of distances and measurements, and draw mechanically the shapes of the faces of the solids studied and the shapes of some common objects based on them. In the same way draw the shape or plan of a school yard, a garden, a field, a town, a part of a city. Draw around the tablets used as units in designing. Cut with scissors free-hand, from paper, the faces of the solids studied, as well as fruits, animals, and artificial objects of interest.

FIFTH YEAR

Form study and modeling.—Review the study of the previous solids and planes, especially circles, ellipses, spheres, spheroids, hemispheres, cylinders, cones, and ovoids. Construct the cylinders and cones in cardboard. Model such natural objects under nature study as may be convenient. Model geometrical and conventional forms in relief, as simple crosses, etc., on tiles. Model simple, regular, curved-line conventional objects in relief, as trefoils, quatrefoils, cinquefoils, etc., also natural leaves and fruits on tiles.

Æsthetic study and drawing.—Continue the designing of borders, rosettes, and all-over patterns in color, using the brush where needed. Give attention to æsthetic form composition and the pleasing division of surface areas applied to decorative arrangements for school programs, title pages, tailpieces, and book covers. Conventionalize some of the natural forms studied under the head of nature study, and use them for units in design. Study pictures, such as "The Shepherdess" and "By the Riverside," by Lerolle; "Queen Louise and her Sons," by Steffeck; "Washington Crossing the Delaware," by Leutze. Review previous color study and take up the broken colors and use them in design, such as the neutrals and the colored grays, as the russets, the citrons, and the olives. Study Egyptian ornament.

Pictorial drawing.—Draw with the brush and color, the pencil, the pen and ink, or the crayon (occasionally blocking in the outlines), flowers, sprays, plants, or animals, used in nature study, and objects, natural or artificial, based on objects circular in action, as spheres, spheroids, hemispheres, cylinders, cones, and ovoids, singly and in groups of two or three. Treat inductively, that is, derive principles from observation and experiment. If circumstances favor, some systematic shading may be introduced. Use drawing freely to illustrate simple stories, geography, history, literature, and imaginative compositions. Use very freely free hand and arm movement exercises based on circles and ellipses. Draw frequently from memory, and draw in mass from children posed before the class in interesting attitudes.

Working drawing.—Draw mechanically common objects having but two dimensions and no appreciable thickness. The use of compasses or dividers may be introduced where needed. Draw and cut from cardboard patterns for cylinders and cones, and all units used in designing, and mark around them, instead of drawing the separate units free-hand. Draw diagrams to illustrate other studies, as comparative weights and measures and fractional operations in arithmetic.

SIXTH YEAR

Form study and modeling.— Review the study of previous solids, especially of objects bounded by straight edges and plane surfaces, as square planes, cubes, oblong squares, and triangular prisms, square pyramids, and hexagonal prisms and pyramids. Construct some of the above in cardboard. Model conventional leaf forms in relief on tiles.

Æsthetic study and drawing.—Design and draw more elaborate borders and all-over patterns, divide definite surfaces ornamentally, and give some attention to landscape composition. Conventionalize natural forms for spots or units in design, and use units derived from historical ornament. Study pictures, as the "Horse Fair," by Rosa Bonheur; "Christ and the Doctors," by Hoffman; "Lost," by Schenck; and "Moses, Joshua, Elijah," by Sargent. Review rapidly previous color study and take up the complementary colors by the use of colored papers and pigments, or water colors, and use them in designing. Study Greek ornament.

Pictorial drawing.—Draw with the pencil, the pen and ink, the crayon, or the brush and color, flowers, sprays, whole plants and animals, used in nature study, and objects, natural or artificial, based on objects bounded by straight edges and plane surfaces, as square planes, cubes, oblong, square, and triangular prisms, square pyramids, and hexagonal prisms and pyramids, singly and in groups of two or three. If circumstances permit, bring in more shading. Draw frequently from memory and from some one posed before the class interestingly costumed. Use very freely large and small free hand and arm movement exercises based on the square, the oblong, the triangle, and the hexagon. Treat inductively.

Working drawing.—Continue the mechanical drawing of objects of two dimensions. Use compasses and draw from scales preparatory to the solution of geometrical problems. Cut out units for design in cardboard, and draw diagrams to illustrate other studies, as in history and geography. Draw patterns for the construction of the solids mentioned under the head of *Form study and modeling.*

SEVENTH YEAR

Form study and modeling.— Model historical ornament in relief, especially the Egyptian, the Greek, and the Roman elements. Model natural objects when convenient. Model the human hand and the foot.

Æsthetic study and drawing.—Design and draw patterns for book covers, grilles, gratings, or screens. Review the elements of Egyptian and Greek ornament, and study and draw the elements of Roman ornament, using the brush where needed. Conventionalize natural forms for spots or units of design. Continue the use of water colors, illustrating the three analogous harmonies, that is, harmonies of tones, harmony of hues, and harmony of grays. Study pictures, such as "Aurora," by Guido Reni; "Columbus at the Court of Spain," by Von Brozik; and "The Edge of the Woods," by Rousseau. Practice pleasing space division, illustrating the analytical and the synthetical methods of designing. Design or select several spots as units and use them in surface patterns.

Pictorial drawing.— Draw with the pencil, the pen, the brush, the crayon, or charcoal, flowers on sprigs or branches, fruit-pods, seed-cases, or whole plants, and animals, as birds, used in nature study, and objects, natural or artificial, based on objects circular in section, and those bounded by straight edges and plane surfaces, as cylinders, cones, frustums, square frames, and crosses, singly and in groups, using shading where possible. Give special attention to balance in arrangement of drawing on paper. Compose landscapes with pencil or brush, as the arrangement and balance of a house, a hill, a tree, or several trees, and a pond, in an oblong inclosing form. Draw occasionally from memory, dictations, and from someone posed before the class. Use very freely large and small free hand and arm movement exercises based on curved and straight lined forms. Use drawing and painting freely in nature study and to illustrate stories, geography, history, and literature.

Working drawing.— Draw patterns for the construction of some of the frames and the crosses mentioned under the head of *Form study and modeling.* Cut out units for design and draw diagrams to illustrate other studies, as mensuration, square and cube root in arithmetic, inventional geometry, etc. Make a special study of the solution of geometrical problems by means of compasses and ruler, and use drawing board, T-square and triangles, preparatory to orthographic problems in the next grade.

EIGHTH YEAR

Form study and modeling.—Model historical ornament in relief, especially the elements of Byzantine, the Saracenic, the Gothic, and the Renaissance styles. Model natural objects if convenient. Model a medallion of the human face in profile in relief, and of the head and face in the round.

Æsthetic study and drawing.—Conventionalize natural forms for units of design. Make ornamental designs for grilles, iron gates, a screen, or stained-glass windows. Study and draw the elements of historical ornament, as Byzantine, Saracenic, Gothic, and Renaissance ornament. Continue the use of water colors illustrating the three contrasted harmonies of tones, hues, and grays. Review all the harmonies. Study pictures, such as "The Gleaners," "The Angelus," by Millet, and "Oxen Going to Labor," by Troyon. Continue the practice of pleasing space division, and the composition of spots, of line, and mass.

Pictorial drawing.—Draw with the pencil, the pen, the crayon, the charcoal, or the brush, flowers, insects, butterflies, groups of beautiful objects, as vases, interiors of rooms, historic houses, as Washington's various headquarters, or the cottage of Edgar Allan Poe, trees, or landscapes. Compose landscapes with pencil or brush. Draw frequently from memory, dictation, and from some one posed before the class. Draw Byzantine, Saracenic, Gothic, and Renaissance ornament from the cast. Study pictures that clearly illustrate the convergence of lines. Use drawing and painting freely in nature study, and to illustrate stories, geography, history, and literature. Use very freely large and small free hand and arm movement exercises based on ornamental forms.

Working drawing.— Make a special study of the solution of simple problems in orthographic projection; that is, the drawing of plans, elevations, sections, and developments of simple geometrical solids and their applications to the working drawing of the mechanic's shop, using ruler, ruling pen, compass, drawing board, T-square, and triangle.

SUGGESTED OUTLINE OF COURSE OF INSTRUCTION IN ELEMENTARY ART EDUCATION FOR UNGRADED SCHOOLS

(ONE-TEACHER, COMMON OR RURAL)

In drawing for the ungraded schools, the aim has been to construct a course of study that is practical and flexible, one that the ordinary teacher can teach and the ordinary pupil can comprehend. In ungraded schools, or one-teacher schools, it is impractical to have a grade or division in drawing for each school year. The youngest pupils just beginning to read and to spell may make simple, imaginative drawings on their slates, some symmetrical drawings and free arm and hand movement exercises, without much special instruction. All the pupils above these should be divided into two groups, corresponding somewhat to the ordinary primary and grammar divisions. Both of these groups, altho doing different kinds of work, may be taught simultaneously, or at the same recitation period of time, by the aid of some suitable published system of drawing. If, however, time can be spared for a drawing period every school day, it would be better to take the two groups separately on alternate days. The order of treatment of subjects in each of the above groups and the amount of work that can be done must depend upon the conditions. What is entirely practical and convenient in one school may be almost impossible in another. In some cases more can be done than is here suggested, while in many other cases not so much can be accomplished. Much of the detail must be left to the intelligent teacher or to the particular system of drawing that may be selected.

In all parts of the course of study in elementary art, care should be taken to cultivate an appreciation of the simple elements of beauty and to develop a love of the beauties of nature and in art. To this end the schoolroom should be furnished with some examples of good art reproductions, and artistic drawing books should be placed in the hands of the pupils, since such pupils have but little other opportunity of seeing art products worthy of careful study.

There should be at least three lesson periods for drawing per week of twenty minutes each in Group I, and at least two periods of thirty minutes each in Group II.

Color.—Teach the spectrum colors from the prism and from the colored-paper spectrum. Teach standard colors, hues, tints, and shades, and apply them in nature-study drawing, in map drawing, in designing borders, rosettes, and all-over patterns, in the division of surfaces into spaces having pleasing relations to each other, and in the drawing of natural objects, as fruits, animals, imaginative stories, etc.

A SUGGESTED GENERAL OUTLINE

FOR GROUP I

The pupils in Group I, which corresponds somewhat to the higher primary grades, should draw very simple, familiar, and natural forms of beauty and interest, as grasses, grains, leaves, fruits, nuts, shells, etc., according to the season. Where it is practicable, color should be used in drawing leaves, apples, peaches, plums, lemons, oranges, and other convenient objects.

There should be some drawing from copy, as from such conventional forms as squares, oblongs, circles, ellipses, reversed curves, spirals, etc., combined in pleasing symmetrical figures, and so taught as to exercise the invention and cultivate the taste of the children.

The bisection, the trisection, and the quadrisection of lines should be taught in connection with the drawing of interesting figures.

Memory drawing, dictation drawing, and sketching from imagination are interesting and important methods of teaching drawing not to be neglected in primary grades or Group I in ungraded schools.

Inventive drawing, that is, the arrangement and the drawing of tablets and other conventional units so as to form borders, rosettes, and all-over patterns, is delightful as well as cultivating to the taste of pupils in this first group, and should not be omitted.

Much use should be made of free hand and arm movement exercises, based on circles, squares, oblongs, triangles, ellipses, etc. No other means will so quickly give strength and certainty to the movements of the muscles and steadiness to the nerves of the hand and the arm.

Well-directed picture study is a powerful means for the cultivation of the crude tastes of children, and it should be the subject of at least an occasional lesson all thru the period of Group I.

A SUGGESTED GENERAL OUTLINE

FOR GROUP II

Form study.—Study such geometrical planes as squares, triangles, oblongs, circles ellipses, ovals, and such solids as spheres, spheroids, cylinders, cones, ovoids, cubes, prisms, and pyramids. Study the shapes, the directions, and the relations to each other of the edges and the faces of the above. Construct some of them in cardboard, especially those having straight edges.

Æsthetic study and drawing.—Design borders, rosettes, and all-over patterns illustrating the different kinds of repetition, as simple, alternate, in a line, radiate, or around a center, and all-over. Squares, triangles, oblongs, circles, ellipses, any geometrical figures and conventional forms derived from natural ones may be used for units of design.

Draw simple and more complicated symmetrical figures than those used in the first group, using both straight lines and curved lines, and copy approved elements in historical ornament. Use the brush freely with ink or color in free-hand work, in designing, and in the division of surface areas, so as to produce pleasing space relations.

Study pictures, such as the "Pet Bird," by Meyer von Bremen; "A Fascinating Tale," by Madam Ronner; "Angels' Heads," by Sir Joshua Reynolds; "Can't You Talk?" by G. A. Holmes; and "The Song of the Lark," by Jules Breton.

Distinguish and name the six standard spectrum colors and the principal intermediate spectrum hues, with their tints, shades, scales, and harmonies, and use them in decorative design.

Pictorial drawing.—Draw with the pencil, the brush, with ink or color or the crayon, the appearances of grasses, grains, leaves, flowers, and other objects, natural or artificial, based on the circle, ellipse, oval, triangle, square, spheroid, cylinder, cone, ovoid, cube, prism, and pyramid.

Use drawing freely in all nature study, whether of animals or plants, and for illustrating stories, real or imaginary, geography, history, or literature. Use very freely large and small free hand and arm movement exercises based on circles, ellipses, reversed curves, spirals, squares, oblongs, triangles, and conventional forms. Frequently draw appearances from memory, also from poses of children or animals.

Working drawing.— Learn definite distances from eighth, quarter, half-inch to inch, inches, foot, feet, yard, and rod by measurement and by the unaided eye. Draw mechanically, by scale and ruler, patterns for making cubes, prisms, pyramids, cylinders, and cones in thin cardboard. Draw mechanically the shapes of the faces of some of the solids studied under the head of *Form study*, and cut them from paper with scissors.

Draw mechanically the shapes of windows, doors, blackboards, wall-divisions, schoolroom floor, school yard, a garden, a lot, a field, a part of a village or a town, a township, a county, or a state. These last will of course be known as "maps," and they may be colored.

APPENDIX A

Notes.—Why is model-and-object drawing so difficult? When we look at a familiar object (a material object occupying three dimensions) we have at first a general concept of it. This general concept is made up of sight elements, tactual, taste, and other elements, which help the mind to a general notion as to what the object really is in space. This general concept as to what an object really is is the almost universal aim of all external observation of things. We seek percepts and hold them only long enough to lead us to true concepts, when they, the percepts, are cast aside as a bridge might be that has done us a service.

Now, notwithstanding the supreme value of these general concepts in all thinking and in all practical life, they are not what we must transcribe when we wish to draw the picture of an object. When we would transfer from the mind the visual image of an object on a surface, we must cast aside the general concept and give attention to one, and only one, visual percept, sighted from a fixed point, and transcribe that. To do this we must lay aside, or inhibit, all the general notions we may have of an object, such as its real size, shape, taste, smell, beauty, color, etc., which the world and our fixed habits have taught us from infancy, and have forced us to regard as the essence of knowledge, and look for one of the infinite number of appearances suggested by the object. This appearance, or visual percept, which hitherto has been cast aside for the truthful concept, is changeable, ephemeral, and elusory, a mere passing shadow or image, created by the spectator. Is it at all wonderful that children find it difficult to do all these things at once?

It will be useful to study the following steps in seeing the appearance or the picture of a material object, because if these steps are clearly seen the instructor may the more easily lead the pupil to lay aside his concepts and give attention to one, and only one, visual percept.

1. We usually first see an image of a material object in connection with other images of material things in space. It is seen in a vague unity, or in a state of unseparateness from the general stream of visual sensations coming from many different objects. This image is unconsciously united instinctively with us in this stream of sensation. This is the vague, hazy, general, or indefinite stage. It is merely the beginning of distinct visual perception. We are merely conscious of something within the field of vision.

2. We must now give attention to this particular image of the object, by separating it in mind from the general stream of visual sensation. We must separate this image from the previously sensed something, and against this something, as a sort of background, hold it (the image) before the mind. This is the stage of analysis, the stage of isolation, discrimination, or separation.

3. Finally, this visual image must be seen again in its relations with the other and surrounding images. It must be compared and unified with these surrounding images in a way not to lose its individuality, and still be distinct in thought. This is the stage of completeness, of synthesis, the stage of creative activity.

APPENDIX B

Notes and definitions.—The following discussion and the consequent definitions seem to be necessary here because, owing to the newness of the subject no doubt, there has been much confusion of thought and vague expression in speaking of matters which ought to be well settled, at least among thoughtful educators.

In general, a drawing is the result of placing significant marks on a surface, usually flat, so as to express real or apparent space relations. More specifically, any drawing, diagram, or painting, when completed, may be considered in itself a conception of some mind made visible on a surface. This conception may refer (1) to some image created by the mind thru the aid of the memory and the imagination; (2) to some visual appearance or percept of an external object; or (3) to the actual relations in space of the points, edges, and planes (real or imaginary) of an external object.

From the above it will be seen that there can be but three general kinds of drawing, each representing one of the conceptions just described: (1) We have the arranging and the drawing of the parts and the whole of a creation as the mind and the taste wish them to be, or "decorative" or "inventive" design; (2) the drawing of the appearances of external objects, or "pictorial drawing;" and (3) the drawing of conventional diagrams to show the actual relations of the parts of an object as they are in space, or "working drawing."

Decorative design.—It is the pleasing division, breaking up, or diversifying of plane surfaces of regular or accidental shape, by means of spots, lines, light-and-dark, or color; or by cutting, carving, or molding; or by any one or all or any combination of these.

Pictorial drawing.—It is drawing or transcribing on a surface, usually flat, what the mind, thru the eye, sees in the presence of a material object having length, breadth, and thickness; or it may be expressed as the drawing of an imaginary visual image of an object; or putting on a flat surface, by means of some marking implement, an eye percept; or the graphic record of a visual percept; or simply drawing appearances.

Working drawing.—It is the drawing of or making visible such conceptions as plans, elevations, sections, and developments.

N. B.—Drawing from memory, drawing from copy, drawing from dictation, free-hand drawing, and instrumental drawing are not *kinds* of drawing at all. They only pertain to the methods and the circumstances of execution.

Drawing from memory.—It is drawing a past or remembered visual percept, or visual image of an object, or a remembered visual concept of an object or of another drawing, neither the object nor the remembered drawing being present to serve as a copy.

Drawing from copy.— It is drawing from or imitating another drawing in sight as it is in space, or as the mind conceives it to be in space, not as it may appear; or it is drawing from or imitating the shape of a real, limited, concrete plane in sight.

Drawing from dictation.— It is making a drawing entirely from a word description, in the absence of the object or any drawing of it.

Free-hand drawing.— A drawing is said to be free-hand when made with the hand and some marking inplement, without the aid of instruments, as rulers, compasses, etc.

Instrumental drawing.— A drawing is said to be instrumental when such implements as rulers, compasses, etc., are used in making it. These two methods may be applied to any kind of drawing.

Signed by

LANGDON S. THOMPSON, *Chairman*.
HENRY T. BAILEY.
CHARLES M. CARTER.
HERMAN T. LUKENS.
HARRIET CECIL MAGEE.
GRACIA L. RICE.

APPENDIX C

DISSENTING OPINIONS BY MEMBERS OF THE COMMITTEE

I regret that I cannot see my way clear to sign the report of the Committee on Art Education, sent me by its chairman. My view of art education is fundamentally different from that taken in the report—at least in its theoretical part. I find there is much relating to the aim of education and the psychological process involved in the educational activities that I do not understand, and I think it quite probable that if I could comprehend them I should find myself disagreeing with them.

Take, for instance, the statement of the aim of education made in the report, that it is "the grand march or evolution or progressive development of the soul (1) *out of* the slavery of mere sense-perception of thing and environment, the supposition of *non-relation*, (2) *into* and *thru* the category of the understanding and the reason, the supposition of *universal relation*, (3) *to* the freedom of pure thought, the supposition of *self-relation*. Hence all fragments, parts, or departments of education should have in view and should tend toward this development of the self-active soul." These propositions mean very little to me. I cannot conceive of any such mental processes as are here indicated. To my mind the purpose of education is to bring the individual into harmony with the environing world, to give him an understanding and a mastery of it. Every individual is related to his environment in a physical way, a social way, an intellectual way, and an æsthetic way, and the purpose of art education should be to perfect the individual's relations to the world on the æsthetic side. In achieving this on the mechanical side the learner must be led to apprehend facts of form and color as they are presented in the things which he will come in contact with in his daily life, and he must begin at a point where these facts are apprehended in a relatively simple and isolated way, and move on constantly to things more complex and involved. There must also be developed in him the ability to reproduce in all ways possible what he sees, that he may keep a record of it and that he may express it to others. In the course of his education the pupil must be led to appreciate the most agreeable relations of form and color, first in relatively simple and then in more and more complex situations, and be trained so that he can create æsthetic objects and situations in which will be embodied these principles of harmony.

The process of accomplishing this end is a simple one in its fundamental features.

The pupil must be led to see the distinguishing form and color characteristics in things to be represented, and he must associate with these the proper manual activities required to reproduce them in drawing or painting or any other form. This relation between motor expression und visual apprehension must be made so facile that the appropriate expression will follow more or less automatically upon the visual perception of facts to be represented. The whole process, on the technical side, consists in leading the pupil to give discriminating visual attention to the things he wishes to represent, and then making their motor expression so perfect that they can be reproduced without conscious effort. Of course in the larger aspects of art education there are involved many problems relating to the development of taste and the creation of artistic things; but these questions have not been taken up in the report.

The theoretical part of the report, it seems to me, is based upon a metaphysical or even verbal psychology, which is likely to confuse the teacher and lead her astray rather than to lend her any assistance in her practical work. Terms are used describing mental processes with which I am not familiar. Take in illustration such a proposition as "the conception of a visual perception." I am unable to determine what this may be, and I find many statements of this character to which I cannot subscribe.

I was placed on this Committee of Ten, I think, because of my interest in the psychological questions underlying art education, and I shall not attempt to do more than to offer a suggestion or two regarding the course of study which the report outlines. I am not competent to pass an opinion upon many of the details of this course, but while much that appears in the course seems to me to be sound, still I have noticed a few things which appear to be founded upon an erroneous educational philosophy. At the very outset the child is expected to study pictures, but for what reason is not apparent. If it is designed that he should study reproductions of great paintings in order to gain principles of technical and æsthetic value, then I should say that this work is altogether beyond the novice. If pictures are to be studied at all they must at the outset deal with the situations in which the child is frequently placed, and he must study a picture for what it expresses in the way of content, and not for its technique. He would not be expected to analyze words at the fifth year to become familiar with their mechanical properties.

Then the report indicates specific objects which the child is to represent at different stages in its development, but I cannot see that any principle of selection has been followed, except the principle that to some extent the objects must represent form and color characteristics similar to those presented in the type forms being studied at the time. To my mind the report does not allow sufficient spontaneity and freedom in the selection of these objects; it would be better if provision were made for choosing the objects and situations with which the child has interesting relations in the experiences of everyday life. Then the objects would not be just the same in Utah as in Madison or Boston, and could not be indicated in any comprehensive way in a report of this sort. The child would keep close to his environment at all times, acquiring drawing as a means of expressing the objects and situations of interest to him. I should give a larger place to what the report calls "imaginative" drawing, where the child illustrates stories, indicating how he conceives the situations described. Imaginative drawing is, in the report, confined at first to isolated objects; whereas a child is interested in situations where such objects are related to one another in causing some event. At the outset the child does not profit greatly by critical study of isolated things.

Again, illustrative drawing should occupy a more prominent place than the report provides for it. In this work the child acquires the right attitude toward drawing. He employs it as a medium of expression, and by means of it the teacher can keep in intimate contact with a pupil's mind, and see how he conceives objects and situations, and she can make good use of it to help the child to correct erroneous notions, and get him into the way of regarding things in their natural relationships instead of in isolation.

(Signed) M. V. O'SHEA.

I subscribe to the above report, approving, as I do, of its main features. The report is quite conservative, and yet attempts to be appreciative of all that has been clearly established by a study of children's drawings.

The chief objection I have to the report lies in its omission to even discuss the stages of development in a child's drawing power. Yet this discussion clearly belongs in a report whose main object is "to determine, in the light of psychology, environment, and experience, a proper basis or bases for a course of study in elementary art education." Many of the most important questions in this field were formulated by the committee but have never been discussed or in any way incorporated into the body of the report. This is a most serious omission, leaving, as it does, the report as a merely logical discussion on a deductive basis.

It seems to me that the question of sequence of material is the vital question in the curriculum. That, however, is not a question for logic to decide at all, but for child study. What material, what objects, what method, what technique are best adapted to develop the artistic nature at each successive period of growth? At what age do children progress most rapidly in art development? (1) On the side of appreciation? (2) On the side of production? What is the course of development in (*a*) appreciative power, in (*b*) executive skill? Should either be stimulated beyond the others? What is the relation of race and individual development in art? What is the relation of the adolescent period of a child's development to the unfolding of his artistic nature?

That these are still unsettled questions is no reason for ignoring them.

(Signed) HERMAN T. LUKENS.

I offer the following statement of dissent from the report of the committee:

1. The psychological section of the report does not take into account the latest and most authoritative statements regarding the essential nature of art nor of the action of the mind in art creation.

2. The courses of study included in the report do not, in my judgment, meet the needs of the schools at the present time. They lay out sequences of class-room work which could have been followed ten years ago; but the betterment of school conditions and the awakening of more general and intelligent public interest in art and elementary education make possible a distinct advance beyond the ground covered in these courses of study.

Respectfully submitted,

JOHN S. CLARK.

DEPARTMENT OF MUSIC EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 9, 1902

The Department of Music Education met in the Andrew Presbyterian Church, Minneapolis, at 9:30 A. M., President A. J. Gantvoort in the chair.

In the absence of the secretary, Mrs. Gaston Boyd, Mrs. M. L. Chapin was appointed to act as secretary.

Miss Clara Thompson sang two numbers, and the president gave his greeting to the members.

Mr. Thomas Tapper, of Boston, spoke upon "The Future Development of Public-School Music," and was followed by Hollis E. Dann, director of music, Utica, N. Y., upon "An Anomalous Situation, with Suggestions for Improvement."

Both of these papers were discussed at the close of Mr. Dann's paper. Those taking part in the discussion were Messrs. Mountz, Corson, Marx, Cross, and Mrs. F. E. Clark. As a result of this discussion, Mr. P. C. Hayden made a motion, which was carried, that a committee of three be appointed by the chair to present at the next session the names of three members who should be instructed to formulate a plan of study for teachers of music in the public schools, this plan to be presented at the session of the department next year. Miss McClure, Messrs. Weaver, Tapper, Congdon, and others spoke of the work already being done along this line.

The chair appointed as this committee Mr. Dann, Miss Brant, and Mr. Krinbill. The following persons were named by the chair as a nominating committee:

P. C. Hayden. Mrs. F. E. Clark. Mr. Mountz.

The department then adjourned to Thursday at 2:30 P. M.

SECOND SESSION.—THURSDAY, JULY 10

The department met at 2:30 P. M., President Gantvoort in the chair.

The opening number was an illustration of public-school music given by the Adams School chorus.

Miss Elizabeth K. Fairweather, of Cincinnati, O., read a paper on "The Psychological and Ethical Influence of Music."

Mrs. Frances Elliott Clark, superintendent of music, Ottumwa, Ia., presented the subject of "High-School Music." Mr. P. C. Hayden, of the *School Music Monthly*, opened the discussion, and was followed by Messrs. Krinbill, Johnson, and others.

After a song by Miss Hiscock, Frank L. Nagel, musical director, Des Moines, Ia., read a paper on "The Musical Qualifications of a Teacher of Music in the Public Schools." Sterrie A. Weaver, of Westfield, Mass., opened the discussion, and Miss Wilson and Messrs. Fullerton and Weeks followed.

A motion was made by Mr. Johnson that the incoming officers request of the president of the Department of Superintendence that a paper on "The Needs of Music in the High School" be given a place upon the program of the Department of Superintendence, which meets in the winter. The motion was carried.

The committee to nominate a committee of three to formulate a course of study reported the names of Mr. Thomas Tapper, of Boston, Mr. A. J. Gantvoort, of Cincinnati, and Hon. O. T. Corson, of Columbus, O. A motion was made, and carried, to instruct the secretary to cast the ballot of the department for the nominees.

The nominating committee presented their report, and the following officers were elected.

For *President*—Mr. Sterrie A. Weaver, Westfield, Mass.
For *Vice-President*—Mr. W. A. Wetzell, Salt Lake City, Utah.
For *Secretary*—Miss Helen W. Trask, Minneapolis, Minn.

A committee on resolutions appointed by the chair reported thru their chairman, Mr. Hayden, that the department desires to express thanks to the officers of the Association, to those who had provided music for the department, and to the chairman of the local committee.

The department adjourned.

M. L. CHAPIN, *Secretary.*

PAPERS AND DISCUSSIONS

AN ANOMALOUS SITUATION, WITH SUGGESTIONS FOR IMPROVEMENT

HOLLIS E. DANN, SUPERVISOR OF MUSIC, ITHACA, N. Y.

It is a trite saying that music is now recognized as a necessary part of the school curriculum from the kindergarten thru the high school. Ten years ago a poll of the foremost educators connected with the public schools thruout the United States revealed the fact that they were practically unanimous in giving music a place in the daily program. State, county, and city superintendents thruout the country are practically requiring music of some sort. More than three-fourths of the common schools are studying music in one way or another, while city schools without music are considered decidedly unprogressive. It is no longer looked upon as simply a diversion, nor is it considered an incidental ornament to the school program. Its educational value is freely conceded.

The eminent educators in practical control of the public schools have, with remarkable unanimity, welcomed music as an important part of the course of study. Thus far they have been consistent and progressive. Failure to take the next step places the school authorities of any state in an anomalous, illogical, and indefensible position in regard to school music. Upon the power that controls the admission of any subject into the public school rests the responsibility of making provision for its proper presentation. The licensing power is in duty bound to provide safeguards against incompetence in the teaching force, to fix some standard of qualification for the teaching of every subject placed in the course of study. Of all the subjects taught in the public schools, music is the most harmed by incompetence or lack of skill on the part of the teacher; and yet, both as regards subject-matter and methods of presentation, music is, of all subjects, the most unfamiliar to the teacher. Add to this the fact that it is the one subject that is not required in the teacher's professional training, and we have a state of affairs which demands careful and serious attention.

The situation is aggravated by a failure of the school authorities to fix a standard of qualification for the supervisor. Provide the grade teacher with competent supervision and she will in time gain a fair knowledge of the subject and skill in presenting it. This, however, the authorities have signally failed to do. There is no standard set for the would-be supervisor, no test of qualification, no competent authority empowered to pass upon his fitness or unfitness. One may not teach reading or arithmetic without a license, but if he desires to teach singing in the schools, to be intrusted with the care and development of children's voices and their general musical education, he may enter upon his duties without a license, and without satisfying any required standard of fitness whatsoever. He may not conduct a spelling lesson without satisfying the constituted authorities of his knowledge of the subject, but he may go on impairing the voices of thousands of children because of his ignorance of what should be the A B C of every supervisor's training, and no effective protest is made.

Another discouraging part of the matter lies in the fact that school boards and patrons do not detect bad and pernicious results. People in general fail to use ordinary common-sense and judgment the moment they come in contact with music or music teaching. Where in the field of education is there a parallel to the gullibility of the public as regards vocal teachers? Given a lusty voice, with plenty of nerve and good advertising ability, and a veritable novice in music will make a good living teaching "voice culture" in almost any community in the United States. He needs only to proclaim that he has studied abroad with Shakespeare, keep his pupils constantly before the public, and the dear papas and mammas will swear by him, altho he may be literally breaking in two and straining beyond repair the voices of their children. If one of these papas has a promising colt to be trained, he will select a trainer only after the most careful investigation concerning his record as a caretaker and speed-maker. He will watch the colt's progress daily, and, on the first evidence of incompetence or failure to make speed, promptly change trainers. The same papa will send his only daughter to school for nine years and never once go to the school or interview her teacher. It is this unaccountable indifference and lack of appreciation of the evils and dangers involved, combined with the astounding stupidity of the public in its judgment of music teaching, that has made possible this anomalous condition in public-school music and allows its continuance.

It must be said, however, that the failure on the part of the public to judge intelligently of music teaching is not wholly due to indifference. The public don't know, and it knows that it don't know. Even the superintendent of schools usually finds himself incompetent to judge of the work in music. The able and experienced superintendent gives invaluable assistance and wholesome criticism to the entire corps of teachers, excepting the supervisor of music. When witnessing the work in music, the superintendent is entitled to look wise, and usually proves his wisdom by consistently neglecting to commit himself further. If he be a man of courage, and feels sure of his ground, he is also entitled to look pleased, while the supervisor, perchance brilliantly incompetent, goes his way in perfect peace, fully conscious of the unique situation which shields him and his work from destructive criticism. The supervisor of music, whether he be an expert or a novice, must plan and carry on his work unaided either by expert assistance or criticism.

It is peculiarly necessary, therefore, that the supervisors of music should be men and women of good scholarship, sound judgment, and thoro professional training. They should be broad enough to see and appreciate all sides of the subject. The too frequent controversies among supervisors, threshing over matters that should have been settled in the training school, is evidence of an inadequate and one-sided training. For example, it is anything but creditable to the leaders in school music to be found either discouraging the teaching of sight reading or arguing against rote singing and song interpretation. Both are essential. One may be able to secure results in sight reading that will astonish and delight most of his patrons, and yet be utterly unfit to supervise school music. He may secure sight reading and still be devoid of musical taste, ignorant and incompetent regarding tone quality, and utterly indifferent concerning the necessity of keeping good music constantly before his school. Such one-sided work is a failure, and is justly condemned by the best class of musicians. Again, it is equally true that school music is emphatically a failure where it does not give the children the power to read music; where the study of sight reading is neglected and the technical study of music is considered uninteresting and beyond the comprehension of little children; where the energy of the supervisor and teachers is concentrated on song interpretation alone. It would be equally sensible to study the English language by means of recitations and declamations learned by rote.

True success lies in developing both sides of the subject, and it follows that the supervisor should have, as it were, a twofold education; first, a technical training, providing a practical knowledge of musical notation, the elements of harmony and counterpoint, a fair degree of familiarity with musical literature, and more or less skill as a singer and accompanist; second, a professional training, adding to his academic knowledge skill in methods of teaching. He must study the child voice and learn the simple but all-important principles which govern its care and development. He must also be an expert in the classification and treatment of adult voices, a training invaluable in the work of the high school. In addition to all this, he should be a capable and successful conductor of both chorus and orchestra.

Is it urged that this will require years of preparation before one may become a supervisor ? So it will, and so it should. The character of the work demands more than ordinary ability and training. The ordinary high-school teacher must take four years in college or university before beginning teaching; can it be maintained that the general culture and professional training of the supervisor should be on a lower plane ? The whole trend in school affairs is toward increasing and broadening the teacher's equipment. Speed the day when the specialist in school music shall be the peer of his colleagues in ability, scholarship, and special training! Our calling, instead of being lowered and cheapened by free entrance, should be guarded and uplifted by a comprehensive and elevated standard of admission. The proper and only way to gain for the profession its rightful place is to elevate the character and equipment of its membership. A higher standard means better ability, better training and better compensation, with infinitely better service to the community.

This paper would be incomplete if it failed to suggest a remedy for the evils pointed out. Several weeks since, the writer prepared and sent to all state superintendents of public instruction four specific questions concerning public-school music, and invited an expression of opinion upon a fifth, based upon a statement of facts concerning the responsibility of the state in the matter of the competency of the supervisor. Thirty-four replies were received. Every one of the thirty-four heartily favor the teaching of music, and in the states where it is not taught extensively the superintendents deplore the fact and hope for its general introduction. Twenty-seven have some sort of music course in the normal schools; sixteen requiring it for graduation, eleven making it elective. Four provide regular instruction in the county institutes. In only four states is there any serious attempt made to examine candidates for supervisor. In the remaining thirty, the examination of the supervisor is left to the city superintendents and boards of education, who do not examine. These officials, being unable to pass upon the competency of the applicants, choose the supervisor either upon letters of recommendation, general hearsay evidence, or personal preference. Fourteen expressed no opinion on the last question; four thought the state had no responsibility in the matter, and sixteen believed it the duty of the state to establish and maintain a standard of qualification for the teaching of music in the schools.

Two things are evident from these replies: First, the state departments of public instruction are favorably disposed toward music to a surprising degree; second, the competency of the men and women on whom the success of the whole matter depends is virtually left to chance, with practically no protection against incompetency.

What can be done to improve the situation? Whatever is attempted must be done in a careful and conservative manner, with due regard to existing conditions in the particular school system under consideration. In states requiring uniform examinations for all grade teachers the problem is simple. In the state of New York, for instance, simply one change on the part of the state department in its attitude toward vocal music would result in gradually working out a solution of the difficulty. Let music be placed on the same basis as other subjects in the course of study; let it be truly recognized, and not, in effect, ignored. This would require but one addition to the force in the state department. It would necessitate having on the board of examiners one person thoroly qualified and experienced in school music. His services would be invaluable. He could help bring order out of confusion. Take, for example, the matter of music in the normal schools. As long as the selection of the instructor in music is left to providence and the board of trustees, so long will the normal-school training in music be, in the majority of cases, a miserable farce. The marked success and effectiveness of the work in an occasional normal school where there is a competent and successful instructor only proves the folly of the present system. With capable instruction, based upon a well-planned course of study, excellent training in vocal music might be given to a majority of the grade teachers of the state. It is entirely feasible to gradually establish a standard of fitness in music, both for the grade teacher and supervisor, doing great good to the cause of school music, at small expense, and working hardship to no one except the hopelessly incompetent. Neither should there be great difficulty nor serious opposition to the working out of this or some better plan.

A few weeks ago the superintendent of public instruction of a great state wrote as follows concerning music in the schools:

> I am in hearty sympathy with any movement which is to give the subject of vocal music proper consideration in the public-school curriculum.

He and all other progressive leaders are only waiting for sufficient light to enable them to act wisely. They do not know, and ought not to be expected to know, the needs of school music. On those who do know, on the progressive supervisors of this country, rests the grave responsibility of making plain to these and other powerful friends of music the proper means of lifting this, the greatest of all forms of expression, out of the mire of incompetence toward the domain of art. They have adopted music into the family of studies; now let her guardians see that she be not abused nor neglected; that somehow there shall be provided a way of protecting this, the most sensitive of the arts, against crude and unsatisfactory teaching; that there shall be built up a profession thoroly qualified and equipped for the great work which it is destined to do.

To this end should the efforts of this department be directed. By sinking differences concerning matters of detail, and uniting on the essential truths held by all sane members of the profession, the Department of Music Education should represent the most progressive thought and spirit of the times, doing its full share toward placing music where it can do its unique and wonderful part in the refinement and unification of this great people; sowing and nourishing in their hearts a spirit of love and devotion which will help mightily to live, and, if need be, to die, for country, for home, and for the brotherhood of man.

THE PSYCHOLOGICAL AND ETHICAL VALUE OF MUSIC

ELIZABETH K. FAIRWEATHER, TEACHER IN NORWOOD HIGH SCHOOL, HAMILTON COUNTY, O.

In this age the characteristic attitude of every activity is the scientific. A *raison d'etre* is demanded at every turn. Education is not exempt, but, lifting itself out of the traditional and haphazard, is seeking to deduce rules of practice from certain first principles. Here the so-called new education calls on psychology for principles of instruction, and on social science, including ethics, for principles of education; the one dealing with methods, the other dealing with subjects proper to create the well-educated man.

To meet this urgent demand for a rational psychology upon which to base a systematized education, there has arisen in the field of philosophy a band of most earnest thinkers, who, going beyond the study of perception, reflection, judgment, will, etc., are studying the evolution of the whole personality — not merely of the intellect. To these men we, as teachers, owe an immense debt. Their work is not yet done, nor our obligation finished, altho they urge upon us not to expect too much, nor to expect any patent process.

Today we give attention to one of their findings, and to a few thoughts which grow out of it. They state the end of education as a training, not to get a living, but to live; as an effort to put the child in complete possession of all his powers; to furnish him with a complete preparation for life as a whole; to make him a dynamic personality; to enable him to adjust himself to the civilization in which he finds himself and the universe of which he is a part.

As we place our system over against this ideal, how ill-adapted to such high purposes it seems! How has it gotten where it is? In our mad zeal for knowledge we have concentrated all our attention on the intellect. Grudgingly we have yielded lately a few minutes a day to the training of the body for health and the hand for skill, but we have had no time or place for the systematic cultivation of that third side of man — the heart, the sentiments, the emotions. May we not here have our finger upon the cause of the widespread disappointment in the results of modern education? Our smart men are not all good men. We must recognize a philosophy of the heart, which underlies that of the head. The feelings are mighty factors behind will and action. To know is often not enough to move to do, but to feel is to act. It is not only necessary that the emotions be trained, that right aspects of them be inculcated, before which the baser will disappear, but that it be attempted not too late. The emotions show themselves early, and settle into fixed habits, which make or mar one's happiness thru life and that of all who come in contact with one.

With the cultivation of the feelings goes that of the imagination, by which one can be led to create a world of his own, to conceive ideals of beauty, virtue, nobility, happiness, by which his life may be dominated, and to enter into the joys and sorrows of his fellow-beings, and even to approach the divine source of all being.

Education must foster whatever elements are in man; it cannot deal solely with the surface, but must take cognizance of the vast and spiritual behind and beyond.

This need for awakening and cultivating the feelings which lie at the foundation of all sensation and will, in order that there may be a harmonious development of body, mind, and soul, readily makes itself felt, but it does not suggest how it shall be done. Neither are the voices of our guides, the psychologists, so unanimous.

Few think that the study of ethics as a science will give us help, since that should come late in development, and the books so far presented for use in the schools are very inadequate.

Some of the leading thinkers hold that all knowledge is saturated with feeling; that each subject in the curriculum has its feeling side, its moral tone, which should be inculcated with it, and give no special place to moral instruction elsewhere. This necessitates the teacher having the right feeling, and lays a heavy responsibility upon him.

All agree that, in the finest sense, the highest things cannot be taught, but must be caught, as it were, by contagion. Spirit grows by contact with spirit. This brings us to the supreme importance of a great personality in the teacher.

As a further outgrowth of these two facts — first, that some subjects have more of the ethical element than others, namely, that those into whose creation the most spiritual force has gone can give out the most; and, second, that, being denied the touch of a great living personality, the child can be brought under the spell of those works which are the very embodiment of the great souls of the world — we have the great service modern psychology has done in justifying the arts in education as the expression of every dream and aspiration of the human heart by master spirits.

But even among the arts there are degrees of usefulness. Painting and sculpture are limited by their material. It is impossible to bring the child into direct contact with the masterpieces, while copies and casts are unsatisfactory. In poetry there is the limitation of language; but still, as Shelley says, "Poetry lifts the veil from the hidden beauty of the world." The most available art seems to be music. Thru it we can bring the child into touch with those highest moments in art in which great ideals were realized, in which noble aspirations and sentiments were successfully embodied, and his experience must be enriched, his life widened and deepened.

Often the truest and deepest emotions refuse to be expressed in words. When language fails, music can take up the thread, on the one hand revealing the workings of the spirit within him, thus bringing him a consciousness of his individuality; on the other widening his horizon, revealing to him a world of infinitely beautiful, organic, all-pervading, living order, and making him feel his place in the great harmonious whole, showing his relation to his fellow-men and to his creator. Music is a means of keeping in relation with the deepest realities and of sustaining the soul's purer and higher life. It leads to truth and to beauty.

Here is the supreme value of music: to give the child a medium for expressing what he feels. This expression reacts upon his soul, intensifying, in turn, the original emotion, leaving him broadened and deepened. Then as he studies the great works and finds he is not alone, but one of a great company, experiencing many things in common, and as he finds adequately expressed what he dumbly feels, he is led out from his narrow little first feeling into the fullest sympathy with the noblest and the highest.

Music is the outcome of a desire to share with and to convey impressions and enjoyment to others, and is the direct expression of man's innermost feeling. What privilege can be greater than to teach others to find the terms by which they will understand what these great men mean, to teach them to find the key by which they can unlock the secret places of their own hearts and of the universe?

That this end is not attained by all music teaching must be admitted. Where the teaching is perfunctory, music can never realize its true mission or reach a dignified place in the course of study. It is not a matter of notation and dynamics, or fine exhibition performances, but a deep realization of what is back of all that — the composer's soul experience, which has driven him to utterance. To this the strong teacher must add the skill to make this felt by others. It is necessary that the music teacher add to her regular training a knowledge of the principles of psychology and pedagogy.

May I suggest that a good deal of the failure might be traced to a lack of appreciation of the importance of rhythm, which is the very essence of all music, and which makes it the key to the universe? I mean rhythm in its broadest sense, that divine rhythm which pulsates in all things and by which music is allied to all things. This rhythm manifests itself in the divine order of the universe, in the poise of each man's inner being, in the phenomena of color. Someone has said that all physical life is perfect in proportion to the perfection of its rhythm. In music it is the very basis itself. It is not enough that the teacher feel this and realize its importance, but she must find the way to develop a sense of it in the pupil. This must begin with more training of the ear, which is now so neglected. How much of the ear's work is turned over to the eye! When one hears a new word in his own language, or in learning a foreign tongue, how frequently he says, "Oh, if I could just see it written I could remember it"! How many people must write out the word of whose spelling they are doubtful, not daring to trust to the discrimination of the ear! There is room for a great deal more attention to this culture of the ear. The eye is trained in a hundred ways, but it cannot do all the work. As the child is trained to a sense of rhythm and to a genuine appreciation of tone color, he learns to know good music from bad, and why it is one or the other. I should like to make a strong plea that the child be given some understanding of the end aimed at by the teacher. Likewise that he be made to feel in some way the need of the laws which he studies in theory, that he may see how they help him. Here is one of the plainest paths in the way of discipline — to lead the child from obedience to the laws of the teacher back to the Law behind them, and before which both teacher and pupil must bend if there is to be harmony. In music he sees that obedience to established laws brings out beautiful and harmonious effects. He can be led to see that those laws are but parts of the great laws of the world, which require implicit acquiescence on the part of all, that unity and concord may rule in the world.

By leading the child to see the end aimed at, his desire to do something is aroused, and he welcomes the means to the end of doing that; thus what would be the drudgery of acquiring technique of expression becomes a joy. As someone has put it, his intention leads him to pay attention, which results in retention. Here you have the psychologica process for the strengthening of memory. While I do not see just how it can be done in large classes, there would be the greatest advantage if the children could be led to attempt little compositions in the sphere of their own experience, under guidance, as well as the usual re-creating of others' thought and feeling by means of the voice, for it is thru expression that the child grows and develops. Denied proper channels, he turns in upon himself and becomes misanthropic, or, breaking out without restraint, he lets his passions run riot. Music furnishes an important outlet, since it helps him to know himself, to understand humanity, and to come into relation with the infinite in an emotional way when he cannot satisfactorily in thought; it relieves tension, implants positive qualities, and gives him a soil for right volition; it tends to a love of refined pleasure. The ancients said one need not worry about man's acts in his working hours, for then he is too busy to go far wrong; but that one's energies should be concentrated on culture for the leisure hour. In this leisure hour the boy stands upon the street corner today and waits. Finally he moves in the direction of his strongest impulse. Whether he moves toward the ugly, base, and vile or toward the good, the true, and the beautiful depends upon standards of enjoyment established unconsciously little by little in his past. It is for us to give him the clue to the better things. On Tuesday, Professor Dewey drew our attention to our loss in neglecting recreation and amusement as moral agents, and to the certainty that if we did not provide healthy and innocent forms of amusement the tendency would be to the low and degraded. Music has an exalted place in this field of refined recreation.

As a social agent the value of music can hardly be overestimated. It is a universal, common language, transcending great differences of race, culture, position, and age, and making for unity. Of all arts it is the most social, the one we enjoy best together. In chorus work the individuality of each member can be deepened and his importance emphasized, while at the same time he is taught to work in unison with others for a common end. It is a means of binding him more firmly and more intimately with the social whole.

There is one danger in all this—the confounding of sentiment and sentimentality. Nothing could be worse than the latter, which is feeling sought for itself and affected. True feeling is a divine reality, and worthy our gravest consideration. Here we have taken up one avenue of approach — music. Never has music been so much needed in the world as today, when there is so much attention to material progress and material ends. But the immaterial must stir the material, if we are to be prepared to live the rounded, full life. We must have art for the elevation of the spirit.

It is as true now as in the days of Plato that—

> Music is a moral law. It gives a soul to the universe, wings to the mind, flight to the imagination, a charm to sadness, gaiety and life to everything. It is the essence of order, and leads to all that is good, just, and beautiful, of which it is the invisible, but nevertheless dazzling, passionate, and eternal, form.

HIGH-SCHOOL MUSIC

MRS. FRANCES ELLIOTT CLARK, SUPERVISOR OF MUSIC, PUBLIC SCHOOLS, OTTUMWA, IA.

Fellow-Teachers of the Tribe of Apollo:

We have gathered here, in this beautiful city of lakes, humble worshipers at the shrine of Music, to lay our tribute at her feet, and, with willing ears, listen to her counsel and wisdom thru the inspired words of her devotees.

While we may look backward with some degree of complacency, there is yet much to be desired before school music takes an equal position with other departments of the profession, or its well-deserved place in the curriculum of every public school, and equal rank on the program of every state and national meeting. This position has not as yet been generally accorded us, and why? Evidently there is a break in our defenses somewhere, or, more properly speaking, there is some spot in the bulwark of prejudice of our friends the enemy that we have not been able to break down.

The one great aim of school music, including and absorbing all others, is the evolution of a nation of singing people, an intelligent, educated, music-loving people, a nation of singers, whose rich and mighty volume of ringing tone shall roll heavenward from every valley and mountain top in pæans of praise for the blessings of our commonwealth.

Music has been taught in the grades of most of our city and village schools for many years, and, in the main, well taught. The children read with more or less facility, enjoy and interpret the beautiful songs of the child world, and a foundation has been laid upon which to build a national music at once strong, characteristic, and as rich and free as our own broad prairies and lofty mountains. That this dream is not being realized as rapidly as we could wish is true. There lies a breach somewhere between the singing children of every city and town and the notoriously unmusical adult population. There is no dearth of music among the children from the kindergarten to the grammar grade. Why should not our people, as a whole, be as familiar with the names and choral works of Handel, Haydn, Schubert, and Brahms as they are with the poems of Longfellow and Wordsworth? Is there any reason why we shall not have in every village and town a considerable per cent. of the people able to sing, with pleasure, the folksongs, patriotic songs, glees, part songs, and choruses of the best composers, both American and foreign? Those same children who were able to sing with clear, sweet tone the little songs of childhood, when grown up are, for the most part, unable to sing respectably in a mixed audience even our national hymn.

There is surely a break somewhere, and I believe that the gap is to be found in the high school. Music in the high school is and ought to be a question of supreme importance to all persons interested in any way in school music, to all promoters of musical intelligence in any form; for to the high school, more than to any other place, we must look for the establishment of the art of singing the music of the masters and the founding of an abiding love for the best in the musical literature of modern times.

The high school is a sort of crucible which chaotic childhood is put into, and from which he emerges, thru the kindly administrations of watchful teachers, the self-helpful, self-reliant youth, with hopes, aspirations, and determinations for his career.

If not the birthplace, then it is the cradle, of character. The pupils are filled with the desire to *do* and to *be*. The future is opportunity, the past a tale that is told. They are filled with energy and enthusiasm, wide-awake, and alert. Historical and mythical references are understood, the touches of tenderness and pathos are felt and interpreted, and they give themselves heart and mind to the swaying, swinging witcheries of the score in a soulful way that is seldom equaled anywhere else or with any other body of singers.

Granting, then, that music, for its own wider dissemination and national propagation, needs the high school, does the high school need music? It has been said that the high school is the poor-man's college, and certain it is that the masses who make any attempt at education look to the high school as the zenith of their ambition. Probably three-fourths of the graduates from the various high schools of the country, not counting the large number that drop out before graduation, never seek higher institutions of learning, and their preparation for life's battles, as far as books are concerned, ends on the night of commencement. The high school should offer, then, those studies that will best fit the average boy or girl for his future, not in the way of trades or business necessarily, not fit him to meet some circumscribed college course, but in a way that will render him a useful member of society, and an intelligent, law-abiding citizen. It should give to its young people those things that make for good in the development of character; those things that give a greater fullness of life in any and all conditions; those things that develop the greatest mental activity and sharpen and quicken the whole being, moral, social, and intellectual.

Does music answer satisfactorily these demands? When properly taught in a reasonable, broad, and comprehensive way, it most certainly does. There is no subject in the whole course that requires quicker perceptive faculties, more comprehensive grasp of many details, or is stronger as a brain developer than music, and none is more influential in reaching the mind and will of the pupil, stirring him to better things. The melodic flow of the voice appeals to his æsthetic nature, and he or get anything from the printed page; will have great difficulty in learning at all, and probably never be a good reader.

Music is taken up later in the child life than is language. At five years the average child possesses a vocabulary of perhaps five hundred words by ear and voice, and is ready to begin the eye work. In music our five-year-old is at the bottom of the ladder, possessing a few musical tones and some small ability of repeating tones heard. He is in music exactly where he was at three or four in language. The analogy is plain. The first year must be spent in completing the ear-training, in getting the vocal vocabulary in preparation for written work. Having made such preparation thoroly and well, in the next four or five years is the time to teach, once for all, the process and practice of reading music at sight.

At that age the ear, perceptive faculties, and memory are actively alert, and it is the time of all others to master forever the technicalities of note reading, the words of the language of music. Then in the sixth, seventh, and eighth grades the child begins the life plan of reading to learn. When he enters the high school, then, we ought reasonably to expect him to be able to read accurately, at sight, simple and comparatively difficult music, to know the minor scales, to be at home with chromatics, to be able to sing with well-placed and modulated tone, true to key, his part in the songs, themes, and solfeggios. He should know something of the life and work of, and three or four selections from, two to five of the masters, and have a repertoire of perhaps fifty good songs, by good composers, with words that rank as literature.

With such a foundation, high-school music may be made to cover exactly the same ground as the course in English. There, having begun the classics in the grades, the course consists of a thoro study of the masterpieces of literature, the gems of thought of Emerson, Tennyson, Milton, Browning, and the immortal Shakespeare, reading, analyzing, comparing to get the thought, style, breadth, and depth of the greatest minds of all ages.

So the music in the high school ought to consist of a thoro and comprehensive study of the best productions of the best composers from Handel down to the birthday of the twentieth century. The technique of sight reading being mastered in the grades, where it ought to be, there is no reason why we should be confined to easy songs and jingles that require no effort and bring no material advancement. There is no excuse for the awful waste of time and ability in many high schools in singing over and over trashy weaklings of song of the gospel-hymns order, songs written by certain would-be composers that jingle and jump and jiggle along with dotted eighth and sixteenth notes, and a bit of bobbing, disjointed rhythm in the chorus for bait. The market is flooded with scores of such miserable scarecrows masquerading in the form and name of music; songs that have not a vestige of real harmony, no depth of meaning; songs that caricature pure sentiment with their maudlin sentimentality, and debase and degrade the sacred name of music.

Such songs have no more right in the course of music in the high school than would the dialect poetry and prose or the ten-cent novel have in the English course. We do violence to our better selves, and incalculable harm to the cause, when we cater to so-called popular demand and admit even one to our list. The world is so full of good things that it is folly to waste the time of the school and our own when we might gather the rich harvest from the fields of modern real music and revel in the volumes of the great tone poets. Objection may be raised here that the music of the masters is too difficult and involved for the high-school pupils, and demands too much from young and immature voices. Perhaps it does, some of it, but the great bulk of the standard choral literature, if properly arranged, may be used in an ordinary high school with pleasure and profit. The same objection might be raised to the study of Shakespeare, but no one dreams of eliminating his matchless plays from the course of study. We may not be able to extract all the beauties of a grand chorus, nor appreciate it fully, perhaps, possibly we may not have sufficient volume of tone to give it like a company of grand-opera singers, but it is our business to *educate*, not to furnish entertainment. We are forming the taste for only the best in music. The real value of these great things lies in the study of them, the intimate acquaintance with and knowledge of the great hearts that made them, much more than in the finished production.

How much of this great mass of material can we study, how much can we hope to accomplish, in the four years' school life of each graduate pupil? Under certain unfavorable conditions, very little; with fairly good circumstances, a great deal. With little or no classification, with small, straggling classes, or one great heterogeneous mass, or with poor hours, or with an indefinite program, little can be expected. If we begin with the ninth grade in miscellaneous chorus work, and continue thru the twelfth grade with the same miscellaneous chorus work, we evidently are not aiming at anything, are not going in any especial direction, and cannot expect to accomplish anything.

On the contrary, if we can have the grades by themselves, in separate divisions, some progressive plan is made possible, and a course of study may be followed that leads to something.

After the heavy demands in reading and theoretical work of the eighth grade (and there because the children are best prepared to do it there), and in view of the large number of changing voices, it seems best that there should be a decided change in the ninth grade, a rest from the solfeggio and drills, a year of song gradually leaving the do-re-mi for strictly sight work. Here is a place in the course where the folksongs and national songs of all lands can best be studied, because of their small demands on the voices and the ability of the pupils to look up the historical references, which serve as a preparation for the work in history, and also for their singableness, which is important at the crisis of bridging over the gap between the eighth grade and the high school. Supplement this with a dozen light, easy choruses, and the way is paved for further advancement.

In the tenth grade the voices are not yet mature enough for the heavier work. If we can have it alone, valuable work may be done in stirring choruses of medium difficulty, containing much part-work in canon form and with broken rhythm among the parts, and difficult chromatics.

Here, too, is a place where musical history can be taught to advantage. High-school pupils should know as much of the growth of music as that of Greece and Rome.

If this can be accomplished, then a solid preparation is made for the advanced work of the eleventh and twelfth grades. Here the door is wide open for using and enjoying practically the entire choral literature of the world. Eleventh and twelfth grade boys and girls are quite mature; they have already had so much really good music that their taste is critical. They have their voices under control, and are far enough advanced in other lines to appreciate the lights and shades of meaning of words and music, and they give themselves up to it so completely as to cheer your heart with the glow and glamor of their enthusiasm. These young people go out into the society of the town carrying with them, ringing in their ears, these great choruses. In a few years the alumni forms a leaven to lighten the whole lump.

What are the personal needs today of supervisors, to enable them as well as their work to stand side by side and rank with other educators of the school system ? If school music has not reached the plane we wish, we, as supervisors, have not been guiltless. Our sins of omission and commission have been many and serious. We have been content to enter upon our work with meager preparation, and to continue therein without growth. It seemed all-sufficient if we could sing or play respectably, and not necessary to trouble about a general culture, a broad, well-balanced education to fit one for a fuller life. The teacher of school music needs a wider knowledge of mankind; needs to be awake to current events; needs more than a bowing acquaintance with the literature of the past and present; must have, with Ophelia, wept; with Jack Falstaff, laughed; must have dreamed with Jeanne D'Arc, and dared with Jeanne Deans. It is not enough to know music alone; we must be able to meet on their own ground, intelligently at least, our co-workers in other lines.

The high-school teachers are the best-educated and cultured people with whom we come in contact. Their friendship and companionship are of inestimable value to us.

"Mind sharpeneth mind as steel sharpeneth steel," and the full-fed brain of these college-trained high-school teachers may be to us a wellspring of information and instruction. Their meetings for self-help should be our meetings as well. We need pedagogy, psychology, Herbart as well as they. If any of them desire to study German or French, we need it too. We need to identify ourselves closely with the life of the high school in all its phases, not only as a matter of policy, but of self-improvement.

It is not criminal if circumstances compelled us to begin our work with insufficient preparation, but it becomes so if we continue to draw our salaries from year to year without strenuous effort toward progress that leads to power. We cannot draw sustenance for long from the same fountain we ourselves are feeding; the pool becomes stagnant, and decay is the result. We all long for power. Power in a teacher comes only by growth. Learning more of music and all kindred subjects, doing the old things better each year, is progress that promises power. Power is spelled with personality, opportunity, work, enthusiasm, and righteousness. The initial personality counts for much in one's success. The years of experience are a rosary of gleaming pearls of opportunity. They may mean a cross of sacrifice and toil, but if improved for actual growth must bring the crown of reward. The whole turns on the pivotal center-work. There is the key; just work; work with all our soul and strength; then set it on fire with enthusiasm, and expect the blessing of God, which will come if we try to do our best in his name and for the bettering of humanity.

THE FUTURE DEVELOPMENT OF SCHOOL MUSIC

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There are said to be about fifteen millions of children in the United States who sing every day in school. It costs annually millions of dollars to train this monster chorus.

The training of this chorus, the character of the music it sings, the character it sings into the music, the music it sings back into the character, the knowledge gained in it by every individual, the spiritual strength awakened by it in every individual—these are a few of the forces the responsibility for which rests with the people in this room.

The size of this responsibility, when compared with the size of this audience, establishes a proportion that may seem amusing, yet none the less is it clear and unmistakable in what it suggests.

Even a brief moment of clear vision shows us that what men think and put into books; what men think and put into the act of teaching; what men think and manifest in attitude; what men think and express as the fruit of the faith that is in them, be it force or weakness, positive purpose or makeshift lack of purpose—on the character and potency of these thoughts the little children of the great chorus are being fed, and the food is nourishing them after its kind.

And the kind of food is no secret. What we know, what we think, what we manifest as we teach a child to sing, all these he sings back to us, telling justly what he receives. The children are telling in the very tones of their songs how we conceive them, how we provide for them, after what manner of heart we look upon them. In their singing they are telling the simple truth that as a man conceives himself so he conceives others; as he conceives the value of his work to himself, that very value and no more goes out with it when he teaches others.

We learn this slowly. We believe this unwillingly. It dawns upon us late that the story of the creation, in Genesis, is a man's personal history in his every action. Let us not forget that, having created, the creation looks up to us, as a child to its mother, to smile in the joy of its perfections or to cry in the pain of its imperfection. Thus a child's voice and a child's love for music you create, and at the close of the sixth day they look up to you and you see in them—yourself.

As a profession we are given to the discussion of sight-reading; yet of all the ready readers of symbols where is there a readier or more accurate reader than a child of a man's actions and intentions? That is a matter of "sight-reading" that is worthy of discussion at an annual meeting.

They know—this great chorus of fifteen millions of children—whether it is your intention that out of death shall come life; out of darkness shall come light; out of oppression shall come freedom. They know whether or not it is true that in that day even the children of Abraham shall teach the brotherhood of man.

A man teaching a child is in a great presence. There may be dirt on it. That is explained in this: that God had to send the child over a hard path to bring it and the man together. We must take no risks, we must conceive the child loftily. And equally loftily let him conceive his music. Out of it is the strand woven by which he shall show the child how to fasten himself to the realities of life; these realities making for the brotherhood of man in the name even of the children of Abraham.

With school music you are not dealing with a part of education, you are dealing with the very soul and life of it; with school music you are not filling in a little here and a little there, you are supplying the spirit of it all; with school music you are not merely a toleration in the school faculty, you are its inspiration; with school music the curriculum is not only made complete, but all is quickened. The youth sent out into life with some years of school music mingled with the rest is not merely polished a little brighter in one spot, he is alive farther in. There is more of him. All the rest has come to its true value with the music that is present. Without the music there is not that mingling of harmony which comes when the sounding-board gathers up the message of the strings and throws it off like a tonal rainbow; something beautiful in itself, but even more so as an earnest of the reality of that from which it springs.

Is this placing music too high? Is this overstating the case? Any man who thinks less of his music than I have hinted at should know it better. This does not overstate the force and place of music; it merely suggests some of its possibilities.

Music's power, it seems to me, lies in its deep stimulation of the individuality. It reveals a man to himself no less truly than it reveals one man to another. We seem to know Mozart and Schubert more intimately than we know Rembrandt and Turner. With all men the former touch more that is deeply responsive.

Man works with his hands, forming a rude symbolism in which he tries to tell of the real world within him. And music is the symbolism most commonly understood. To some it conveys knowledge; to others comfort; to others wonder; but it moves them all. We do not comprehend its force as an individual factor in education. Every member of the great chorus of fifteen millions can be lifted into higher, into more vibrant life if we keep our wits about us and never forget the great factors in the case: The wonderful power of music; the wonderful power of individuality; the wonderful opportunity one has who teaches.

Thru my conviction that we do not yet begin to realize the force and value of music in the public schools I am compelled to ask if what is being done for music thruout our country is a fair tribute to its deserts. Are we paying in full the debt of responsibility we owe to the great chorus of fifteen millions? Or may we bring them yet a little more intimately into relation with the life of rare moments which, as one grows older and becomes more immersed in the affairs of bread and butter, grows less and less brilliant, and by and by threatens to pass like the fading of twilight?

Comparatively few studies in the school curriculum are not taught with a fair degree of uniformity in all communities. Of comparatively few studies is it true that each year's work is not a definite quantity. It is usually stated by lecturers on education that the subjects now forming the curriculum have entered one by one in the order of their utility. A thoughtful man might question the utility of the curriculum as it is, but he cannot question the fact that it is possible to estimate with a fair degree of accuracy how much reading, penmanship, and mathematics an average boy of fifteen will have, practically irrespective of the community from which he comes. This fact is a business asset of value to authors, teachers, superintendents, and boards of education. But this statement has not always been a fact. Once upon a time the unevenness in third-grade arithmetic, for example, over a large geographical area was greater than it is now. The difference lessened more and more as men interested themselves in the subject, discussed it, made known their experiments and results, and related with what success they worked according to a definite schedule; changed the schedule and worked again, and again, and still again, always simplifying and naturally always progressing. Thus everything in our personal history moves or has moved thru various stages, passing up from the period of just getting along to the period of getting the best there is.

This scheme of transition is particularly true in education. Once arithmetic was taught very unevenly, because the exigency of the situation demanded action first, discussion afterward. After a while, when things began to move somewhat smoothly, men began to take a day off now and then to study their surroundings and to observe the work of others. This process produces skilled thought, which is the better name for skilled labor.

Many musicians who have been in schools little or not at all have spoken forcibly of the inutility of school music, charging that it produces neither singers nor sight-readers; that it does not increase the musical status of the community; does not help the choir nor the choral society—all of which is accepted as true by another man of the same opinion, but by no one else.

Any man who will go into schools of all kinds, in all parts of this country, and ask to hear the music lesson, will get a knowledge of some facts, if he keeps out on the road long enough. He will learn that the country is extensive and the conditions vary enormously; that in many communities there are skilled professional men whose teaching is remarkable; that in countless other communities children are crying out for help, like sick men in a mining camp, and are being assisted, with wonderful results, in some cases by skilled people who have come away from large cities, in other cases by a class who are either possessed by a spirit of good luck in their treatments, or else are natural healers; he will learn that the children in remote corners of the United States often sing in a manner to surprise and delight, and that every day is a busy day in school. He will deduce no little from what he sees. Some of his deductions might run as follows: There is unevenness in music teaching; the best teaching is not always done in large cities; the supervisor usually wastes himself by doing work that should fall to a subordinate; the grade teacher who is not learning the music work is to be set down as an opportunity wasted by the supervisor; nothing in all the field varies so much as the equipment of the supervisors themselves.

I once observed a good man led into exceeding embarrassment by his own generous impulse. He arose to address a meeting of music supervisors. He was a distinguished man, accustomed to speak before audiences of specialists. His first words were his Napoleonic Waterloo. They were these: "Whence comes the music supervisor as a scientifically trained educator?" The question sounds innocent enough, but, like many nervous, insistent men, he threw such energy into it that most of the audience stiffened perceptibly and assumed the defensive. That puzzled the speaker. A few, however, smiled; that seemed to comfort him. These, he evidently concluded, are with me. They were, but only in the interest of amusement. At the end there was a period of twenty minutes for discussion. In that time the innocent but well-meaning gentleman learned whence the music supervisors come. He learned that some supervisors are well trained, there having been an opportunity at hand; that some are untrained, no adequate opportunity having been at hand; that a demand often forces a man into the work before he has thought of preparation; that when fifteen millions of children arise to sing, there are places all along the line where any "natural healer" may fall to and help. The row of boys and girls is long, and extends from the heart of the cultured city to the remoter confines of civilization.

A man addressing a gathering of physicians can readily infer what intellectual experience is common to the various individuals in his audience. Whether they come from London, Vienna, or New York, they have been familiarized with much that is the same. They have enjoyed a fairly uniform training.

A man addressing a gathering of music supervisors is less positive of the educational course pursued by each individual before him. This will lead him to inquire what training they receive, and where they secure it. He will be surprised to learn that many, instead of going to schools specially designed to give such training, find themselves immersed in the work ere they have investigated it in detail. They are compelled to learn it as they go on. When the investigator returns to the question of special training schools for music supervisors what does he find? You all know what he finds. He finds that: (1) There are but few schools in the country devoted to supervision; (2) geographically, they are so unevenly distributed that they may not deal fairly with the just and the unjust; (3) there is no commonly accepted standard on which these few schools base their courses of study, hence there is nothing for the student to pursue that is definite.

These conditions demand remedies: (1) That the principles of training schools for music supervisors meet the representative supervisors and agree upon a course of study; (2) that this course of study should be carried out in all schools uniformly; (3) that the growing importance of school music as a special professional career should be made evident to young men and young women of ability, in the expectation that they will pursue it; (4) that the number of training schools should be increased.

The subject of school music has reached that point in the history of its development where these changes are demanded. It presents itself very forcibly to me that, as we are responsible to every member of the great chorus of fifteen millions, it falls to us to engage ourselves actively in this reform. Some delightful results will follow:

1. Supervision will extend to places that do not now enjoy it.
2. Supervision as a whole will become more even, and better music work will be done in the normal schools.
3. The young man and young woman who desire to specialize school music will pass from adequate normal-school training to adequate special training.
4. The grade teacher will come from the normal school better equipped for the daily music lesson.
5. The supervisor will have a chance to draw his salary for doing his own work, instead of throwing himself away in little tasks.

This sets him where he belongs. Here and there, as you know, the belief obtains that the moment the grade teacher can conduct the daily music lesson well the supervisor must go (he ought to go, if that is the kind of supervisor he is); otherwise he will remain and attend to the higher qualities of his profession, bringing forth a result in school music that the world now knows not of.

I have always maintained that an excellent music supervisor, at a generous salary, is the best investment a community can make. No mayor, alderman, or overseer of the poor can compare with him. The intellectual and spiritual contribution which it lies in his power to make to his community are beyond the terms of my stating. He ministers to everyone about him thru a beautiful art. Certainly one who does that is not lightly to be thought of. You recall the office of town musician in the old German principalities. His modern prototype is not the leader of the village brass band. It is the music supervisor. He is an amusing anomaly. Ordinarily the community that hires him does not suspect his value, and he usually does not show that he realizes the musical possibilities of the community that has invested in him.

I wish he would pre-empt the post and do all it suggests, continuing outside of school the work he does in it. Do not say the town could not afford to pay him. After he has shown the community to itself he may dictate his own terms of surrender. When we actually look to see the course of the country that is becoming musical we are astonished. It is the change in the general mass. The well-known composers, whose names you know as well as I, are not doing as much, after all, to change the mass as that man is whose daily labor is to be a good guide, a sympathetic friend, a careful teacher, a lover of music and of children. He is the man who, every day, leads his section of the great chorus of fifteen millions and inspires it every time. His office is that of the music supervisor.

This, the Department of Music Education of the National Educational Association, has met for a number of years. It is likely to continue to do so. Have you ever noticed that the annual report, tho it weighs several pounds, contains little or no mention of music in its general sessions?

It is deemed sufficient to grace any of its proceedings with a solo (at times on the cornet). How many of you have ever been invited to appear before the general sessions and contribute your quota to the sum total of human knowledge they are piling up in the annual report? Very few have had that honor. But, instead, you are set here apart and advised to love one another. You cannot make any very extensive application of that behest in an audience of this size.

This, I think, is largely your own fault. If the opportunity comes for you to go over the way and give information about music to the elect, be wide-awake and have something ready to give, something that will make college presidents, state superintendents, boards of education, and the like sit up straight and wonder why they had hitherto overlooked you.

I would suggest that the president of this department, with your approval, appoint a committee to determine some facts of prime importance:

1. What course of study and acquirement would constitute an adequate knowledge of music for the grade teacher?
2. What course of study in general education should a student pursue who aims to become a music supervisor?
3. What course should he follow in music?
4. How may schools, public or private, be established in every state where such study may be provided to young men and women?

One might continue these questions to an indefinite number; but in these four there is ample trouble for one administration. If these questions, or a few of them, could be conscientiously investigated by a small committee, willing to work hard and to pay its own postage, I feel sure it would bring back to this meeting next year a report you would listen to with joy and admiration. This work of investigation and formulation should be carried on every year. Then the Department of Music Education would push itself onward; it would in time be the means of establishing school music well and aright; of permitting it to show its value more fully; of bringing things about in such way that grade-teachers' work and the supervisor's work would each fall into place, one supplementing the other; then the music supervisor could draw his salary for doing his own work, instead of for doing a grade-teacher's work.

These questions I have offered you for consideration are, as you know even better than I, but the very beginning of the matter. In like manner this department could investigate systematically and report on the extent of kindergarten, primary, grammar, high, and normal school music. This department could, to its great advantage, institute an inquiry into the music of every state, what towns have it and what have not.

The accomplishments in school-chorus performance should be closely watched. Every significant achievement should be reported here. You would then come to these annual meetings and get something directly contributing to your own work. Carrying on this inquiry for a time, we would soon have information worth one hundred cents on the dollar to superintendents, boards of education, and the general sessions of the National Educational Association. Do this and the great chorus of fifteen millions will move us when it sings.

But let us not forget this: Lord Macaulay has pointed out that the annals of history record many battles won by armies commanded by the incompetent general. But in the annals of history there is no record of a single battle having been won by an army commanded by a debating society. The investigation suggested here deserves debate, but that alone will avail nothing without long-continued and enthusiastic labor.

MUSICAL QUALIFICATIONS NECESSARY FOR A TEACHER OF MUSIC IN THE PUBLIC SCHOOLS

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This subject will be considered from the conditions as they are at present. I say at present, for the reason that these are but the pioneer days of this all-important branch of musical culture in this country. In this pioneer work we are confronted by situations and circumstances that have to be taken into consideration, and that play no small part in the is-ness of things. Music in the public schools is a new thread in the warp and woof of our educational life, and the hands so long confined to the handling of cotton and wool homespun may be found clumsy when this bright gold thread is suddenly thrust into the loom, with the order: "This must be woven into your cloth and appear in your finished goods smooth and harmonious." The average teacher is certainly confronted with a problem.

We will therefore first consider our topic from the present status of things. We will say how little a teacher should know about vocal music in order to efficiently assist in this pioneering. We will take it for granted that the supervisor is fully equipped for his or her work.

The teachers in the primary grades should be able to read the simple exercises that are used for beginners, and beginners should be the primaries. It is of great importance that the musical education should begin with the tenderest years, for it is easy to impress the soft, pure tablet of thought during the first years of school life with the fundamentals of music as well as the three R's. This sight-reading necessarily implies a knowledge of time and rhythm. It is in these primary grades that genuine, solid work *must* be done, for it is here the foundation is laid upon which the advancing grades are to build. Unless there is to be a mushroomy, flimsy structure, that will not bear close inspection, we all know there must be conscientious work done by the teacher in this foundation laying. It is the part of the work affording the least opportunity to "show off" your pupils, even as the slow process of digging and putting in the foundation of a building is the least observed both before and after the building is erected.

But it is our duty as exponents of our much-abused art to raise our voices against this lack of proper foundation work. Sight-reading is one of our great needs, and it is this very need that has brought about the increased facilities for music in the public schools.

The primary teacher no longer teaches the child to say, "This-is-a-cat," "That-is-a-rat," and calls it reading. Neither must the child be taught the simplest exercises or songs as a parrot would be taught them. The primary teacher must, therefore, have sufficient knowledge of musical expression to avoid this danger, for, as important a part of this question as sight-reading is, it is not the whole thing. The spirit of the thing must not be buried in the letter.

The first expression of music was rhythm, and this is an important point with the primary grades. While the supervisor selects the songs and exercises, the teacher must have a thoro knowledge of rhythm and time.

These primary teachers must have some knowledge of tone production and what this signifies. The young voice must be handled gently and wisely; otherwise we shall have in a few years' time a lot of crippled, misshapen voices that will be nothing short of criminal. To illustrate: What could be more offensive than the monstrous nuisance of the so called "methods" used by some so-called "vocal instructors," who have turned loose upon the listening public a horde of singers with quivering, vibrato methods of producing tone that reminds one of so many frightened billy goats. Give me a cultivated voice, but let the billy goat stay in the back pasture where he belongs.

The teacher should be able to sing a pure, clear tone, and if unable to do so should keep still, for the child thought is too receptive to have any bad pictures held before it. Indeed, the grade teacher should do no singing beyond what is absolutely necessary. If unable to sing a pure tone, the teacher should know *how* it *can* be done. Young children need a curbing hand when it comes to singing, for they are naturally disposed to shout, and the voice *must* be intelligently guarded and guided during the first grades. The real teacher is one who seeks for what is within the child, finds it, and then nourishes and develops the child's native capacities. The old way of simply pouring and cramming the same thing into every pupil is no more teaching than darkness is light. As the grades ascend, the grade teacher must naturally know more about the science of music.

The higher grade teachers should be able to build an exercise as a suitable study for that special grade, tho I do not advocate the extensive use of home-made exercises. You will see at a glance that this means a good deal to us now, but in the lapse of a few years it will be considered a matter of course. There is so much that enters into the fabric of music, when you set out to furnish a whole garment, that each teacher should set before himself a high standard and never stop until it is attained. You cannot jump up to this elevation in a course of "six week's summer schooling," but you can *begin*, and climb one step at a time, always working in the light of thoro understanding of what you leave behind as you advance. The higher grade teachers must have an intimate personal acquaintance with musical history, musical biography, and musical lore in general; and the teacher who has never looked into the vast storehouse of music will find many brilliant gems to set into his coronet of knowledge. It is the refining influence necessary to education and culture, and twenty years from now all these efforts to raise the standard of music, to bring this sweet breath of harmony into darkened and sodden homes, will be rewarded. The higher grade teachers need not sing unless there is the ability to present a pure, clear tone. There will always be some pupil or pupils who will be able to "lead," and with the thoro work done in the primary grades the pupils will be able to read. These are the *necessary* qualifications for the teachers of our public schools, as we *now* stand, and no teacher need feel the least alarm about undertaking the task set before him, for it is not difficult of attainment; it simply requires a systematic, conscientious effort on the part of any man or woman who has chosen the vocation of teacher. Good teachers in any line work for *results*, and not merely for the reward. In a few years' time this country, as a nation, will feel the beneficent influence of this most important work of putting music into the lives of every school boy and girl in the land.

In each grade the work should be *thoroly* done, and this does not mean that a few or many songs should be well sung, by any manner of means. No more is a pupil a thoro mathematician who can swiftly and accurately work a certain set of problems than one is a thoro musician who can sing a certain number of songs in the most acceptable manner, if these songs are not merely the structure that rests on a solid foundation. And when in due time we look upon the beautiful results of some years of work and see a symmetrical structure fitly framed and put together with classic columns and gilded dome, let us not forget to give thanks for the unseen and humble work of the foundation layer — the primary teacher.

There should be an all-around effort made to equip the country teacher with a good knowledge of this entire subject, for here is the greatest need. The children are cut off from much contact with any sound of music, except the hymns as they hear them in the country churches, or the "fiddle" as they hear it at some country dance; and it is here we find Egyptian darkness so far as music is concerned.

I once came in personal contact with an illustration of the difference between the musical development among the lower classes of our own country and that of foreign nations. One summer, while camping in the mountain fastnesses of Utah, where a small fertile valley was almost shut in from the outside world, save for a few stray peddlers who occasionally found their way into this by-path of civilization, I would hear in the twilight times the distant tones of a trombone, played in an unusual manner. Little snatches of opera, symphony, or sonata would occasionally be wafted to our camp in the most tantalizing fashion. When we found that trombone it was in the hands of a man who was earning $40 a month as watchman at a tunnel that made its way thru the Wasatch range. He was a Swiss shepherd, who with his little family had made his way from the vicinity of Neuchatel, Switzerland, to central Utah. He could not read and write in his own language, but in the universal language of music that day laborer was perfectly at home; and a German, an American, and a Scotchman sat down and listened to this Swiss shepherd play "The Evening Star" as an artist would play it. It *is* a universal language, for we all heard the same thing, and *felt* the same, as the sweet tones of this classic were given to us by this $40 a month tunnel watcher the same as it would be given in New York's Metropolitan Opera House. He showed us the picture of a large band to which he belonged in the mountains of Switzerland. Some weeks later our camping party walked a few miles up the valley and came to a farm-house, where we found a number of people enjoying a Sunday afternoon. We joined them. In the party were several people connected with a railway section house in the neighborhood. The mistress of this section house, who was present, asked a young man if he would dance for us. He consented, and we saw a tall, finely built, intelligent looking American, who used good language, get up and "cut the pigeon wing" and do the clog dance, while an equally intelligent looking American marked the time for the dancer with a "pat-the-juba." This is a heathenish condition of things that should be remedied for the sake of our nation, to say nothing of our firesides and the individual.

It is not the purpose of this paper to say *how* this shall be done; it deals only with *what* must be done. Therefore, we say, let the teacher in the rural districts be equipped from top to toe as a missionary in the wilderness of sin. Yes *sin*, for it *is* a sin to leave our country folk without the glorious sunlight of music. The great Bear River canal, that starts away up in Idaho, coming down thru Utah and Colorado, has honeycombed a barren cactus desert with an irrigating system until no more fertile soil exists than this one-time arid waste place.

When we have a sight-reading, music-understanding public we will have paved the way for the orchestra to gain a foothold. These are not impossible ideal conditions, but are what should be, what will be, and speed the day when we shall find the little chart classes beginning this work that is systematically carried thru until we see "music" on every diploma given to the public-school lads and lasses of these United States!

DEPARTMENT OF BUSINESS EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 9, 1902

The department was called to order at 2:45 P. M., in the Minnesota School of Business, by the president.

Prayer by the Reverend J. M. Riley, of First Baptist Church, Minneapolis.

The program for the session was carried out as follows:

Violin solo—Master Walter E. Stenvig, "Ninth Concerto," *De Beriot.*

"President's Address," I. O. Crissy, state inspector of business education, board of regents, Albany, N. Y.

"Are Business Courses in Public Schools Inimical to Education?" A, E. Winship, editor *Journal of Education*, Boston, Mass.; Durand W. Springer, director commercial department, high school, Ann Arbor, Mich.

"What Shall the Public Schools do for the Commercial Student, and What for the Business-Man Wanting Help in His Office?" H. M. Rowe, accountant, author, and publisher, Baltimore, Md.

Discussion by H. E. Dann, director of commercial department, high school, Ithaca, N. Y., President I. O. Crissy, and Carroll G. Pearse, superintendent of schools, Omaha, Neb.

"Length and Content of Commercial Courses in Public Schools," William E. Doggett, assistant principal commercial high school, Brooklyn, N. Y.

Discussion by C. E. Stevens, director commercial department, South High School, Cleveland, O.

"At What Age Should the Student Begin the Business Subjects, (*a*) When Expected to Complete a Four-Year Commercial Course in a High School? (*b*) When not Expected to Complete Such a Course?" J. H. Francis, principal Commercial High School, Los Angeles, Cal. [Subject presented *ex tempore.*]

Discussion by Edward W. Stitt, principal Public School 89, New York, N. Y.; E. N. Bonnell, Central High School, St. Paul, Minn.

Upon motion, the following committee on resolutions was appointed:

C. E. Stevens, of Ohio.
H. M. Rowe, of Maryland.
Edward W. Stitt, of New York.

Adjourned.

SECOND SESSION.—FRIDAY, JULY 11

The department was called to order by the president at 2:45 P. M.

The following program was presented:

Vocal solo—Mr. Crosby Hopps, "The Message," *Blumenthal.*

"The Preparation of Commercial Teachers for Work in the Public Schools," B. H. Meyer, professor of institutes, School of Commerce, University of Wisconsin, Madison, Wis.

"Requirements for Actual Business," George A. Booth, The Booth Preparatory School, New Haven, Conn.

Discussion by J. M. Anderson, president Metropolitan Music Company, Minneapolis, Minn.; T. P. Twiggs, director commercial department Central High School, Detroit, Mich.

"A Practical Commercial Course for a Massachusetts High School," E. E. Gaylord, director commercial department, Beverly High School, Beverly, Mass.

"The Education of an Amanuensis," Selby A. Moran, Principal Stenographic Institute and teacher in high school, Ann Arbor, Mich.; Mrs. M. L. Veenfliet, principal Alpena Business College, Alpena, Mich.

Report of the Committee of Nine, D. W. Springer, Chairman.

The following report of the Committee of Nine was read and duly received by the department:

MINNEAPOLIS, MINN., July 11, 1902

To the Department of Business Education, National Educational Association:

Your Committee of Nine, appointed in conformity with a resolution passed at the Detroit meeting, respectfully reports progress as follows:

This committee was assigned the work of preparing a monograph on Commercial Education which should formulate an efficient code of procedure for the conduct of such education in American public schools.

The first meeting was held in Philadelphia, March 27, the only absentees being Messrs. Bookmyer and Francis. At a second meeting, held the following day, the committee was favored with the presence of Professor Charles DeGarmo, of Cornell, and Dean Haskins, of the School of Commerce, Accounts, and Finance of the University of New York.

Discussion of the general problem involved occupied most of the time of these meetings. It was agreed that the course of study outlined should be four years in length; that each member of the committee should formulate a commercial course suitable for public high schools and submit it to the other members of the committee in time for examination before the Minneapolis meeting. The committee has held three sessions this week, attended by Messrs. Doggett, Gaylord, Rowe, Francis, Crissy, and Springer, and also an open conference meeting. Each member present has defended the course submitted by him, and criticised those offered by the others. The following general statements have been agreed upon as governing the committee in its deliberations:

The paramount factor in shaping commercial courses in public schools should be the welfare of the student who goes directly from the high school to his life work. It is expected, however, that such courses will provide a training of such character as will fit the student completing them to enter schools of commerce and industry now being established by many colleges and universities.

We believe that, where possible, separately organized commercial schools are advisable; but we realize that in the great majority of places the work must be given in the regular public high schools as one of the several courses thereof.

Commercial courses will include many subjects now taught in public high schools, altho the methods of presentation in some cases may not be those best adapted to the needs of the business student. We realize that in most schools it will not be possible to organize separate classes for the commercial studies with methods specially modified to meet the business student's wants.

A discussion regarding the proper classification of such technical subjects as should be given in a business course, and the order of their presentation, has consumed much time, and it is expected that the committee will be able to report next year a commercial course of four years that will satisfactorily meet the wants of the high school.

DURAND W. SPRINGER, *Chairman*,
Director Commercial Department, High School, Ann Arbor, Mich.;
WILLIAM E. DOGGETT,
Commercial High School, Brooklyn, N. Y.;
CHEESMAN A. HERRICK,
Director School of Commerce, Central High School, Philadelphia, Pa.;
E. E. GAYLORD,
Director Commercial Department of High School and Editor *Business Education*, Beverly, Mass.;
T. W. BOOKMYER,
Principal Sandusky Business College, Sandusky, O.;
ALLAN DAVIS,
Principal Business High School, Washington, D. C.;
H. M. ROWE,
Accountant, Author, and Publisher of Business Text-Books, Baltimore, Md.;
J. H. FRANCIS,
Principal Commercial High School, Los Angeles, Cal.;
I. O. CRISSY,
State Inspector of Business Education, Albany, N. Y.
Committee.

The Committee of Nine was, on motion, empowered to elect one of its members as secretary of said committee, and William E. Doggett was chosen as such secretary.

The Committee on Resolutions submitted the following report, which was unanimously adopted:

Resolved, 1. That the thanks of the Department of Business Education be and they are hereby tendered to Chairman G. A. Gruman and the other members of the local committee for their care in providing excellent accommodations for the meetings, and especially to the proprietors of the Minnesota School of Business for their many courtesies.

2. That our thanks be extended to the president and other officers of the department for the excellent program provided.

3. That the Committee of Nine be continued, that the chairman have power to fill any vacancy, and that thanks be extended for the valuable work done by the members.

The following officers for the year 1903 were then unanimously elected:

President—J. H. Francis, Los Angeles, Cal.
Vice-President—T. P. Twiggs, Detroit, Mich.
Secretary—C. E. Stevens, Cleveland, O.

TEMPLETON P. TWIGGS, *Secretary.*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

I. O. CRISSY, STATE INSPECTOR OF BUSINESS EDUCATION, BOARD OF REGENTS, ALBANY, N. Y.

The work of the present convention of this department was practically laid out for it a year ago, when during the closing hours of the annual meeting the following resolution was unanimously adopted:

> *Resolved*, that the portion of the president's address which refers to the matter of program be referred to the incoming president, with the suggestion that as far as possible its ideas be carried out, and that a committee of nine be appointed to prepare a monograph upon commercial education.

I was not present during the closing hours of that session; but from reports received from the retiring president, the mover of the resolution, and others who participated in the discussion of the resolution, I felt justified in interpreting its meaning to be that the monograph on commercial education to be prepared by the Committee of Nine should relate specially to business education in the public schools, and that the work was intended to include the formulation of a general course of procedure and detailed courses of study for business education in such schools. This conclusion was justified by precedent also, in the fact that in earlier years similar work had been done in the interests of the private business schools. At the Denver meeting, in 1895, on the suggestion of the late J. M. Mehan, president of the department, the memory of whose sterling worth and charming personality is cherished by all who had the privilege of knowing him, a committee was appointed to formulate a course of study for the business colleges. Mr. Mehan became chairman of this committee, and an elaborate preliminary report of its labors, printed in pamphlet form, was placed in the hands of members of the department at the meeting in Washington, in 1898. The final report signed by the chairman was presented by ex-President Springer at the Los Angeles meeting, in 1899, and may be found, in full, in the report of the United States Commissioner of Education for 1898–99.

This statement seems to me a sufficient apology for the close connection of the present program with the work of the Committee of Nine appointed in accordance with the foregoing resolution. In my circular January 22, outlining the work for the present year, I said:

> It must not be supposed that in this suggested program there is manifested any intent to limit this department of business education to the consideration of public-school interests. The business-college men were first in the field, and must continue to maintain their interest in this department, whose papers and discussions circulate thruout the educational world. . . . . Between the private business school and the public schools having commercial courses there is perhaps, from the money side, a certain diversity of interests; but from the educational side the interests of the private school and the public school are much the same, and there is no reason for their not working together in perfect harmony to the advantage of all concerned.

To this statement I now wish to add that, while the present program is essentially a program in behalf of the public schools, and especially of the high schools, which thruout the country are taking up the matter of business education in response to a constantly increasing demand, yet the work of the Committee of Nine is so broad, and the papers bearing on it cover a field so extensive, that this meeting cannot fail to benefit all who are interested in business education. Tho the public secondary school is the special subject of consideration, there is not an educational question involved that does not concern the private business school; and for this reason the representatives of private schools are most cordially and earnestly requested to participate in all the discussions of this convention. The committee particularly desire to have the benefit of their large experience in this line of work. Entire freedom of discussion (subject only to necessary time limitations) is invited and expected.

In the selection of the Committee of Nine I have been governed necessarily by two leading considerations: First, to secure men who would *serve*, not merely in name, but with their best thought and with a keen sense of the responsibility involved; and, second, to secure men recognized as having large experience and intense interest in business education. Another, tho less vital, consideration was to have the members represent different sections of the country and also differing views regarding certain phases of the work assigned to the committee, while at the same time cherishing an earnest desire for the complete success of that work. It therefore gives me great satisfaction to be able to say that there is not a member of the committee whose appointment has not been approved by all of his fellow-members. It was evident from the first that the committee could not complete its work in a single year. Two meetings were held in Philadelphia, March 27 and 28, at which all but two of the members were present, and a definite line of work was laid out. There was a free and informal exchange of views, which disclosed a harmony respecting the vital principles under discussion that was highly gratifying. At the second meeting the committee was honored by the presence of Professor Charles DeGarmo, of Cornell University, and Professor Charles Waldo Haskins, dean of the School of Commerce, Accounts, and Finance of the University of New York, each of whom contributed valuable suggestions.

As the members were scattered from Massachusetts to California, no further face to face conference was possible until the present week. But in the interim the work did not languish. Each member of the committee was charged with formulating his ideal course for secondary schools to be sent to the president of the department, copies thereof, prepared under his direction, to be forwarded to each of the other members for comparison and study. Each member of the committee (with the exception of Dr. Herrick, who was unable to attend the convention) has also prepared a formal paper discussing some one of the prominent questions involved, which will be read by him during the sessions. Two meetings of the committee have already been held during the present week, and considerable progress has been made. Tomorrow afternoon, beginning at 3 o'clock, there is to be held in this room an open conference meeting, thru which the committee hopes to be materially aided in its work by the suggestions of prominent educators who take a keen interest in the result of its labors. The preliminary report will be made by Chairman Springer on Friday afternoon, when it will be open for general discussion. I earnestly recommend that the Committee of Nine be continued for another year, and that the chairman be authorized to fill any vacancy that may occur in its membership.

I could not, if I would, forestall, or even foreshadow at this time, what may be the conclusions of the Committee of Nine at the end of this convention, or what may be the final result of its labors; but as this will probably be my only opportunity as a speaker during these sessions, I venture a few words in addition to what I have said in the way of history and formal statement.

I look upon the work begun this year as in some respects the most important ever undertaken by this department. The advent of business education in the public schools as a separate and distinct course is, I believe, an epoch-making event. The rapidity with which this course has found favor thruout the country, and the steady gain in the number of students enrolled, leads me to assume that the question as to the right of existence of these courses has passed beyond the stage of argument quite as much as that older question, "Can young people learn anything of business in a school?" If this assumption be correct and these courses have come to stay, there can be no more urgent work for this department than to mark out a line of procedure that will help to bring about the best results both for the student and the commonwealth.

In taking up this work it should be recognized at the outset that it would be absolutely futile to attempt to model the business course of the public secondary school on that of the very best "business college" that ever existed. Both kinds of schools are needed, and both are in a certain sense working toward the same end — the fitting of students to earn a livelihood in business; but the plan, the object even, is different. The private school, with no source of revenue but tuition fees, takes paying students at practically any time in life, and in any condition as to previous education, with the object of fitting them for certain clearly defined positions, by the most direct empirical methods, and in the shortest possible time. The public tax-supported secondary school takes into its course every resident applicant, rich or poor, who has the required preliminary education — the education of the grammar schools. But as the public school is first of all for the state, for the whole community, its first object and its first duty is to make good citizens and safe members of society, and, in order that they may keep themselves safe, to give them finally a reasonably certain means of support. The method by which the public school commercial course seeks to accomplish its object is to give the student a sound general education, and to add to that such knowledge of commercial law, business methods, accounting, and amanuensis work as will make it possible for him, if need be, to go directly from the school into a business house and earn his living, and also give him an opportunity, thru the use of his trained faculties, to attain to a higher and more responsible position in the world of business. It is in the last-mentioned studies that the private business school and the public business school run practically in parallel lines; and it is mainly along these lines that our Committee of Nine desires the counsel of our fellow-teachers of the private schools. In this respect both classes of schools are seeking to do the same work, both are interested in the same questions, and there need be no rivalry between them, except only that generous rivalry as to which shall be most helpful to the student and to one another. Thus by united effort shall we build up the fabric of business education till it shall become an honor to this young and vigorous nation, which manifest destiny is pushing to the very forefront among the great commercial powers of the earth.

The right making of a citizen requires much more than a knowledge of the technicalities of business. Dr. Hyde, of Bowdoin, said in a recent article: "Education aims to fit for three things: To earn a living, to support the institutions of society, and to enjoy the products of art and civilization." It will be observed that the first branch of Dr. Hyde's triad has to do with man's necessities, the second with his citizenship and patriotism, and the third with his capacity for enjoyment.

Such an education must have that foundation in general culture which is the first stepping-stone to a knowledge of the accumulated experience of mankind. There must be, first and foremost, a careful study of English, that he may hold the key to all the other studies, and be able to express his thoughts clearly and forcefully. There must be a study of history, that he may know what the race has been and what it has done, its failures and accomplishments; a study of physiology and hygiene, that he may know his body and how to keep it sound as the fitting casket of a sound mind; a study of geography, that his horizon may be broadened by a knowledge of the vastness of the earth and the variety of its peoples and its products; a study of civics, that he may understand and appreciate the principles and administration of the government by which he is protected, and be able to compare it with the governments of other countries; a study of some foreign modern language, which, aside from its practical value for actual use, will add much to that mental discipline so necessary to quick and accurate thought; a study of mathematics — arithmetic, algebra, geometry — to develop the power of exact reasoning; a study of economics, that he may become acquainted with the underlying principles of trade and the foundations of national wealth; a study of the best literature, that his imagination may be cultivated and there may be opened to him the keenest enjoyment of the products of art and civilization; and, finally, a study of the sciences—physics, biology, chemistry, and kindred subjects—not alone for their practical utility, but that in the field, in the woods, and in the retirement of the laboratory he may acquaint himself with nature's laws, wrest from her her most intimate secrets, and thus be brought into closer harmony with the great Creator of the universe.

If to the foregoing we add a competent knowledge of bookkeeping, commercial paper, and other business forms, as complete a study of business practice and methods as can be made in a secondary school with proper equipment, a study of commercial law, covering the subjects of contracts, agency, and bailment in their application to the affairs of ordinary business, and a study of drawing, commercial geography and history of commerce, shorthand and typewriting, and business composition, I think we shall have satisfied pretty fully the comprehensive triad of Dr. Hyde and furnished such an education as should make a self-supporting and valuable citizen.

I am not in accord with the contention that the commercial high-school course should not train students in the art of bookkeeping. This idea seems to carry with it just a faint suggestion of the play of Hamlet with Hamlet left out. "Let no man presume to enter upon any manner of business without a knowledge of the manner of regulating books," said the immortal Dr. Johnson. I esteem these words as a "golden text" for the business man, and it seems to me that, whatever things he can afford to neglect in his education, a working knowledge of accounts is certainly not one of them. Without this knowledge he can never be fully master of his business affairs, but must depend on others to tell him his exact financial condition. Of course this does not imply that the merchant prince should be his own bookkeeper. What I mean is simply that he should be able to read with quick understanding the story which his books have to tell, even tho it should happen that incompetence or dishonesty had been making the entries.

Now, if you will kindly bear with me another moment, I will recite a few of the tenets of my educational creed as it stands today; but I wish it to be understood that this is without prejudice to the Committee of Nine, and, like railway time-tables, is subject to change without notice:

I believe that the great fountain of business education for the masses of the people is to be the four-year commercial course in the secondary school.

I believe that this course should, and will, possess educational content and development power equal to any course in the school in which it is given.

I believe that, as a matter of sound policy and growing necessity, the normal schools and universities must establish courses for the technical training of commercial teachers for the secondary schools.

I believe, with the Committee of Ten, that the required studies of the commercial course in the public schools should be taught in the same way and order whether the student is or is not expected to complete the course.

I believe, with Commissioner Michael E. Sadler, of the London Board of Education, that "It would be a blunder, from the point of view of the later efficiency of the pupil, to deprive him of a liberal education in order to impart to him an early knowledge of the technicalities of business life."

I believe it would be impolitic and unjust for the public day schools to receive pupils for the sole purpose of instructing them in the technical business subjects.

I believe that the high-school commercial graduate should have such knowledge of the technical business subjects as would fit him to keep the accounts of any ordinary business or to perform the duties of an ordinary clerkship as soon as these were made known to him.

And, finally, I believe with Professor De Garmo that, "If he has equally efficient teachers and is supplied with equally good facilities, the student of the commercial course is not inferior to his brother in the arts course in the range of his education, in the quality of his discipline, in the dignity of his work, or the worthiness of his destination."

ARE BUSINESS COURSES IN PUBLIC SCHOOLS INIMICAL TO EDUCATION

A. E. WINSHIP, EDITOR OF "THE JOURNAL OF EDUCATION,"
BOSTON, MASS.

How many can recall the time when history, physiology, economics, and English were not credited with any appreciable disciplinary value? Even the sciences and modern languages were credited grudgingly. Those were the days in which the most severe curse that could be pronounced against any branch in school, or against any man, was the sneering use of the word "practical." It is worth something to have lived to see these subjects recognized as having some disciplinary value, and to see the word "practical" robbed of its terror.

Not content with the victory already won, the battle line has recently been advanced, and commercial and industrial geography is making a gallant charge upon the physiographists, and there are those who are brave enough to say that it is worth quite as much intellectually to a student to know the history and development of the wheat industry, the methods of its cultivation, the means of its transportation, the schemes for its sale, and the processes of milling, as it is to know the supposed geological record of the Bad Lands of the Dakotas.

Today we have the bravery to advance the battle line still farther, and we shall not blush very deeply, nor shudder overmuch, as we fix the bayonets for another charge in honor of the position that it is possible to so teach commerce, banking, and "practical" economics as to give young people as good mental power as when we teach algebra. No statement could be more hazardous than this, for algebra is on the throne when it comes to purely disciplinary effect. Nevertheless one need not flinch in the least when he stands face to face with the mathematicians and says that their word "discipline" is too vague. We say unhesitatingly that they must allow us to make the word mean vigor, poise, and alertness in mental activity.

Discipline is not some mystical intellectuality which never made a revelation as to nature's forces or laws, or as to human nature and its intricacies. There is more and better discipline in running lines into and thru the Hoosac mountain east and west, so that they meet without appreciable discrepancy, than there is in dreaming over such measurements. Back of the real work there must have been the keenest theorizing, but it is all the better discipline because it has to establish a base line that is tangible.

There was no special merit in the discipline whose boast was that it never harnessed lightning, that it never suggested antiseptic surgery, never hinted at anæsthetics, never discerned bacteriology, or anything that made life more worth the living, that brought heaven nearer or made divinity clearer.

Whatever adds vigor, poise, and alertness to mental activity is disciplinary, and all of these may come as readily in activities that touch the earth at both ends as in those that touch it nowhere. The mathematics of real life may be made to produce vigor, poise, and alertness as well as abstractions; nay, better.

That word "practical" is robbed of its terror. Columbus was practical because he "got there." Edison, Tesla, and Marconi are practical, as are other men who make contributions to the well-being of mankind. It does not mean that one is sordid, mercenary, or selfish. "Utilitarian" means simply that one is useful, and there is no less discipline required to save human life or to add to its comfort and prosperity than there is in neglecting it by abstract dreaming.

There is no kingdom of heaven that has not a base line well established on earth. Thinking must have tangible premises. Logic must walk firmly from fact to fact. Science is after truth that can reveal, and not simply that which has been revealed. Philosophy must come back to the place from which it started and prove the perfection of its cycle by its power to bring back the story of its wanderings. Psychology must never forget that the thinking is done in the human brain, in its cells, or in its tangible matter.

Algebra may be the ideal mathematics, but it is of no avail so long as it deals in x, y, or z. The power of this branch of science is that it gives you the real value of the unknown quantity. It is the liquidation that gives it value. Solid geometry is strenuous discipline, because it deals with length, breadth, and thickness. Trigonometry gives heroic mental activity because it can travel across the country with a reliable step when on a hurdle race over rivers and lakes, up mountain precipices, and into abrupt cañons. Navigation is the bravest of disciplinary sciences, because it plows the trackless sea and rides the wildest waves with the same assurance that one follows the paths of his home grounds.

Business methods have made the grandest strides in all the sciences and arts. In my boyhood no bank was more than local. A man's investments were those he could look after every day. His credits were with men whose habits, personal and industrial, he well knew. Today, banking-houses are national, and even international, one's investments are in stocks of which his share is but one-millionth of the voting power, and whose properties are in forty-five states, in 1,000 cities and towns, and in many nations. His income from these investments is greater than when he could see his property, and it is safer than when it was hidden in a stocking; but its security and earning power are due entirely to the fact that its management in every department is by men who have found in commercial and industrial life more strenuous discipline than was ever discovered by Socrates, Plato, or Aristotle, by Kant or Hegel, by Bacon or Locke, by Jonathan Edwards or Mark Hopkins.

Commerce has had a new birth on the threshold of the twentieth century, and it is no longer a question whether commercial studies have any disciplinary power, but whether in comparison with it other studies have any.

The highest mathematics never get away from the fundamentals that two twos are four, that a straight line is the shortest distance between two points, and the commercial dealings of Armour and Swift, Harrison and Hill, Schwab and Morgan get their entire value from the fact that they can put two and two together more times in a second than other men have done, and can connect more points with straight lines in a given time than has been done before. Fortunes are intrusted to them by the brainiest men of all civilized countries, because there is greater faith in their knowledge of and skill in the handling of the fundamentals of mathematics.

Mr. Hill is the greatest railroad man on earth, because he first carried a bushel of wheat 1,100 miles for a cent and a half, or one-thousandth of a cent a mile, and a ton of coal 1,100 miles for twenty-five cents, or one-thousandth of a cent a mile per 100 pounds. It was the plain multiplication table that made "Jim Hill" the best-disciplined man west of Chicago.

Bring forth the men in any clime or time that have had greater intellectual vigor, poise, and alertness developed by Greek or Hebrew, by philosophy or psychology, by trigonometry or navigation, than has been revealed by the men of the twentieth century, whose discipline has come from the fundamental facts, processes, and axioms of arithmetic applied to commerce.

President Eliot, the most regal of all collegians, said, on the 30th of April last, that he had the honor to be one of a commission of thirty-six selected men to study the problems presented by industrial troubles of the times. Few of the thirty-six men have had an extended classical discipline, but, said President Eliot, "after being in conference with those men I am not inclined to assert that the keenest or most vigorous minds are those that got their strength and keenness in classical discipline."

There is no occasion to question the value of any form of disciplinary training. To every man and mind the methods that will give the vigor, poise, and alertness are needed, and in the new century let no one venture to deny to commercial studies high disciplinary value.

I have seen a neighbor in our summer home by the sea put a keener edge on a razor by stropping it on the soft pine door-casing than I can put on it with hone and horsehide combined, and it ill-becomes me me to deny to the soft pine under his touch that which it does not possess under my hand; it is equally ill-becoming in any man to deny disciplinary power to any branch of study that is putting the keenest edge on American thought today.

WHAT SHALL THE PUBLIC SCHOOL DO FOR THE COMMERCIAL STUDENT AND FOR THE BUSINESS-MAN WANTING HELP IN HIS OFFICE?

BY H. M. ROWE, BALTIMORE, MD.

I assume that this paper will be one of a number which will contribute to the discussion of the matter referred to the Committee of Nine, and I venture to hope that it may also, to some extent, contribute to the conclusions reached by that committee in its efforts to formulate a course of study for commercial education, for it has been prepared mainly with that object in view.

If we can ascertain what will be most useful to the business-man wanting help in his office, we shall know about what the school should do for the commercial student in an ideal training for business.

Restricting the term "business-man" to those outside of the professions on the one hand, and of unskilled labor on the other, he is still in the diversity of his occupations, duties, and responsibilties a highly specialized part of the complex affairs of modern industry and enterprise.

Perhaps we had better recognize at the very beginning the limitations which make it impossible for any school devoted to business training to instruct in all that enters into the equipment of a thoroly qualified business-man. Many of these limitations are inherent. Much that makes for success or failure is found in the mental and physical temperament and natural equipment of the individual. The controlling incentives for the effective exercise of his powers of discernment, discrimination, application, integrity, and concentrated effort do not become active until they are compelled by necessity in the solution of the problems of a business experience after he leaves school.

Again, the diversity of business occupations is so great, and the details as to commodities, markets, prices, and trade conditions are so highly differentiated, that they must be left largely to the teachings of observation and experience after the individual has made his choice of the special line of business which he shall follow.

Within these limitations, however, there is still much that is common to all businesses, pertaining to their general conduct in organization, exchanges, commodities, economic controls, financial operations, and to the ethical principles upon which our commercial and industrial enterprises are dependent for their integrity, which may be properly brought within the sphere of schoolroom instruction, and thus open up a vast field of intense educational interest.

The general work of any office may be divided into two parts: That which has to do with the general conduct and management of a business in determining its policy, in formulating its internal and external orga zation, in fixing the limits of its operations, and in guarding its financial interests. This is the department of initiative and administration, and is the source from which must come the inspiration which shall decide and determine what may be called the individuality of the business. It is the department of "ways and means." It calls for the exercise of the abilities of the mature and experienced business-man.

The work of the second part is subordinate, and has to do with the promotion and carrying out of the policies and plans determined upon in the department of initiative and administration. This is the executive department. It puts into active effect the purposes and aims of the concern. The work of this department may be, and frequently is, subdivided into numerous functions, such as superintendence, finance, manufacture, merchandising, transportation, and record. Taken together they constitute the routine activities which go to make up the detailed visible life of the business.

We must not assume that any commercial student, no matter how extensive his education, can enter the business office as anything more than a novice. His ability to do the work assigned him and to grasp the details of the business as they come under his observation may be great, but an accurate, intimate knowledge of the simpler details of the office routine and mechanism of the business is indispensable as a basis upon which to build the hope for any advancement into the initiative or administrative department.

Restricting this discussion as nearly as possible to answering the questions asked in the title, we shall endeavor to ascertain what the commercial student ought to be able to *do*, rather than what he should know when he engages to help the business-man in his office, and then we may endeavor to ascertain what he should *know* that will best equip him to advance to positions of greater responsibility later on, until finally he shall have attained to that complete mastery of the business which will entitle him to be considered as a potential element in its administration.

The bookkeeper, perhaps, holds the position requiring greatest skill and experience. It includes ability to do the work of all the subordinate positions coming under his charge, such as cashier, entry clerk, bill clerk, etc., and it is in one of these that the young person just from school will presumably find his place.

What is likely to be required of him? Letters are to be copied and filed, bills to be made out, invoices to be checked and verified, orders to be priced and extended, receipts of cash and other remittances to be acknowledged, checks and written obligations to be issued, and all these various papers are to be entered in the proper books of account, the entries to be posted, checked, and verified, statements to be sent out, books adjusted and closed; in short, all the work that goes to make up the routine of the business office is to be performed.

This will require ability to write a good, plain business hand, to perform all sorts of commercial computations rapidly and accurately, to compose a good business letter, and to understand very thoroly the general principles of bookkeeping and have the ability to make entries correctly; and one will not have advanced very far before a knowledge of the laws of contract, agency, partnership, corporations, and in fact all the subjects included under the head of commercial law, will be not only useful, but highly necessary.

In the correspondence department letters are to be dictated, typed, and mimeographed, sometimes ambiguous language and faulty construction are to be corrected, and frequently now-a-days bills are to be made out, reports and statements are to be verified, contracts and other papers requiring legal knowledge are to be written, proofs of circular, catalog, and other advertising matter are to be read and corrected, together with all the incidental work of this character entering into the various lines of commerce and manufacture.

To prepare the student for this kind of work is the first duty of a school of any grade that pretends to impart a commercial education. Business-men have neither the time nor the inclination to supply this elementary instruction. The school must do this initiatory work thoroly. No superficial training will suffice, but a training that is "vigorous and exact" must extend in some of its phases thru an entire course of study, even if it covers four full years.

Any course of study that will supply this training requires at least one year of instruction in penmanship, one year in commercial arithmetic and higher commercial calculations, three full years in English, including grammar and composition and business correspondence, two full years in bookkeeping, which should include, in addition to a training in the various systems practiced in the leading lines of business, a thoro knowledge of business papers, forms, and methods, and one-half year in commercial law, with a sufficient drill and training in all the mechanical features of the work of these various branches to make execution accurate and rapid.

The preparation of the stenographer requires two years training in shorthand and typewriting, one year's training in elementary bookkeeping, and the same amount of work as that required in the other branches named in the preceding paragraph. The allotments of time are based upon the supposition that the student is to carry the other branches which are necessary in rounding out a full four-years' commercial course of training.

We must not delude ourselves, by any lack of appreciation of the importance of this initiatory training, into thinking that a less amount of attention to these subjects will do. Much is expected in these days of the young recruit who engages his services in the counting-room and expects to be paid for them, and no amount of training in any school will fit him, except in rare instances, for more than a subordinate position.

While the apprenticeship system never prevailed here as extensively as in older countries, yet in a modified form, and under a different name, the essential elements of that system largely control in determining advancements and promotions. Business-men believe in the merit system. They practically follow civil-service rules in filling the higher positions in all departments of their business. Effective service in the lower order of duties is the only recognized claim for advancement to higher duties, and the young man who does not show proficiency in the less important "small things" of his calling is lost. There is nothing ahead for him. The ability to hold any position in commercial life, either in its higher executive or its administrative department, presumes the ability to do the work of any minor position.

If the public school shall do this much well for the commercial student and for the business-man wanting help in his office, it will have discharged its greatest responsibility. Whatever it shall do in addition to this will be mainly to give him such a broad general education, discipline, and fund of information as will enable him to advance more rapidly, and with greater assurance of success, toward the more responsible and more lucrative opportunities that may come to him. If the school can give him in addition to the fundamentals the individual power that comes from a trained mind, and so equip him in modern language, science, economics, mathematics, and history that he can extend his business interests more widely into domestic and foreign markets, so much more fully will the school have discharged its obligations to the community and to society.

I cannot agree with those who contend that it is not the business of the commercial high school to train bookkeepers and stenographers, or that commercial education in the public high school should not be specific and technical as well as general and liberal. It may be very agreeable to reason that the work and purpose of the public high school and of the private business school are entirely different and distinct, but such a conclusion is based upon false premises in so far as the technical branches are concerned. If the instruction and training of the high school are to be effective, they must prepare pupils to do the work that will be demanded of them when they seek employment; for the young graduate from the high school must go to exactly the same employer and be prepared to do the same work as the young graduate from the private business school.

In our argument so far we have endeavored to establish the major importance of instruction in that group of branches which is sometimes classed under the head of "business technique," and relates to office training, and which for the most part are included in the curriculum of the high-grade business college.

We may now properly give attention to instruction in the minor or secondary branches which have for their aim the cultural, scholastic, and liberal training of the youth, in distinction from the special or technical, which we have already discussed. The term "secondary" is used advisedly from the standpoint of practical utility.

The branches already referred to will require at least eight years of one period per day, and, if stenography and typewriting are included, ten years, or two and one-half periods per day thruout a four-years' course. This leaves at our disposal two and one-half periods per day which may be devoted to such other branches as seem best adapted to prepare pupils for general commercial life, or will most likely be of the greatest value to him in advancing to higher grades of employment.

The age of pupils entering the public high school averages from fourteen to sixteen years, which is considerably short of the age of mental or physical maturity. This must limit to some extent the amount of advanced instruction we might deem profitable for more mature students.

Again, our great business enterprises are so vastly different in their nature that it is apparent that an ideal course of study should offer many electives from which a pupil might select those which would prepare him for a special line of business. A highly specialized course, however, is not possible for the general high school, but must be left to the few highly organized schools which will doubtless be founded in time in our large commercial and industrial centers. It is evident that the ordinary commercial high-school course must be organized along general lines restricted to supplying the wants of the average pupil.

What will be the best use of the two hours and a half per day for four years which we have remaining at our disposal? Local conditions should be considered. The course of study suited to the needs of a New England manufacturing town would hardly be found the best course for a western mining town. Neither would a course adapted to the wants of a great iron center, like Pittsburg, be likely to be desirable for the city of Baltimore or Philadelphia.

In a general way it is safe to assume that the time should be divided among the subjects of mathematics, science, economics, modern languages, and history. In mathematics, elementary algebra and geometry at least should be completed. In science, chemistry, physics, and commercial geography should be given ample attention. If proper laboratory facilities are provided, instruction in the elements of mineralogy, botany, zoölogy, industrial chemistry, and biology may be made very effective.

A thoro course in industrial economics and political science I deem to be of paramount importance, especially as to a study of local economic controls, transportation, and public administration, particularly of city and local governments.

One or two years may be profitably devoted to modern languages, and of course history, ancient and modern, and especially in its relations to commerce and industry, should have attention.

Just what proportion of time should be devoted to the various groups of subjects is also a matter that must be determined, to some extent at least, by the local surroundings of the school.

The time has arrived when the public high school must provide a course of study that will prepare young men and women for an immediate engagement in business life. If our arguments are sound and our conclusions correct the commercial course must give its first attention to the fundamentals. They must not only be extensively taught, but they must be thoroly taught by competent instructors supplied with proper facilities and equipments. A well-organized commercial course maintained on an equality with other courses of study is the preferable course for a large majority of young men and women. Such a course, to succeed and attract the best class of students, must have the same support, financial, educational, and moral, as is given the English, classical, or any other course. The business-man desiring help in his office does not want the supply to come from a school in which the commercial course is so inferior to other courses that it attracts only the dullards and slowboys.

When the teaching fraternity, and especially the superintendents and principals of the country, realize fully the extent to which the commercial course should command their support and care, and the extent to which it will minister to the material welfare of the great masses of the people, and that it is their duty to provide that instruction which is most helpful, uplifting, and beneficial — when that time comes the business-man will quickly appreciate the advantage of employing the highly trained young men and women who come from the high school, and he, with the community at large, will reap the benefits.

DISCUSSION

H. E. DANN, director of commercial department, Ithaca, N. Y., contended that commercial law was decidedly overworked, and advocated eliminating it from the high-school commercial course.

The president, leaving the platform, said in reply that the difficulty which the speaker had found evidently resulted from attempting too much. He erred in supposing contracts to be a difficult subject for the student, the ordinary contract being in fact a very simple paper.

SUPERINTENDENT C. G. PEARSE, Omaha, Neb., said that he would not attempt to discuss the paper, but desired to commend the well-defined sentiment expressed in favor of a four-years' commercial course, and stated that 40 per cent. of the pupils applying for admission to the Omaha high school chose the commercial course, even after being informed, individually, that the course covered four full years and was thoro and difficult.

LENGTH AND CONTENT OF COMMERCIAL COURSES

WILLIAM E. DOGGETT, ASSISTANT PRINCIPAL, COMMERCIAL HIGH SCHOOL, BROOKLYN, N. Y.

A quarter of a century ago the term "commercial education," as applied to the school, did not signify anything definite, dignified, or important from the public-school man's point of view.

A business education, to the proprietor of a business college and to its students, meant a course in penmanship, more or less ornamental in character, and a course in bookkeeping, with such incidental practice in arithmetic as was needed to work out a few examples in interest, in discounting notes, and perhaps a few problems in equation of payments. In the better business colleges this was well done, and was supplemented with thoro drill in other subjects which would be of aid to the pupil. In others the teaching was poor, and was given by men whose chief claim to the position held was ability to write beautifully. College professors, superintendents of public schools, and principals of high schools looked with disdain upon the work of the business college, and with contempt upon most of the instructors. About 1880, it began to dawn upon the minds of some of the more progressive public-school men that the very existence of these anomalous business colleges was proof that they were—some of them, at least—of value to the community; that they were offering to the public something for which there was a positive demand, and something which the public schools did not furnish. If the principal of a public school was a good writer he would probably give some instruction in penmanship to his higher classes, and, if he understood bookkeeping, would probably have a class in that subject; and thus a few of those so inclined would learn the use of the day-book, cash-book, journal, and ledger. But there was nothing systematic about this, nor was it obligatory or a part of any course. To be up with the times, a few of the progressive men in some large cities established commercial courses in their respective high schools. These courses, modeled largely after the business colleges, included arithmetic, i. e., the so-called "commercial arithmetic," bookkeeping, and occasionally commercial law, while penmanship was not usually deemed a subject worthy of the attention of a high-school teacher. But for some time this course was not given such hospitable treatment as the longer established courses received, nor were its pupils placed upon a par with other members of the school. While invariably a special teacher in Greek and Latin, French, German, mathematics, science, or English would be provided, a special teacher of commercial branches was not thought necessary, and the various subjects of the commercial course were farmed out among those of the faculty who happened to have a little spare time on their hands after their regular assignments had been made. A few more years passed and a special teacher of commercial branches was a tolerated member of the faculty of some of the high schools, and practice in writing became a regular part of the weekly program. Very soon commercial departments began to appear in normal schools of many of the states, and the smaller business centers adopted commercial courses as a part of their curriculum.

Twenty-five years ago there was only a little commercial teaching in some of the schools. Now we are confronted on all sides with the expressions, "commercial education," "commercial high schools," "schools of commerce;" and what does it all mean? Simply that this is the age of remarkable commercial activity and development, and that the country is beginning to realize the value of the services of the educated man in business lines as greater than that of the uneducated man, be he never so shrewd, industrious, tactful, honest. In other words, the notion that the things useful and necessary in business could be learned only in the office or the factory or the counting-house is fast disappearing, and a conviction that hereafter, in business as well as in law, in medicine or in war, the *school* is to be the foundation stone of the superstructure, is taking its place. We are discovering that material prosperity is dependent on educational activity to a marked degree; that progress of nations in the line of commercial advancement will depend as much upon the work done in the schools as upon anything else. With this view of the case, what are we to do? What part are we commercial teachers to play in this remarkable drama of the twentieth century?

In this session of the Department of Business Education of the National Educational Association, in which it is hoped the problems of commercial education are to receive more systematic attention and treatment than ever before, I have been assigned to give my views on the length and content of commercial courses in public schools. This is a broad subject, and in its widest sense includes the settlement of nearly all of the questions incidental to the discussion of public commercial education. I purpose, however, only to call your attention to some conclusions which I have reached after many years of painstaking observation and study in public-school teaching under circumstances which have seemed to me to be specially favorable. In order that you may know the point of view from which I look at this question, permit me to state a few principles and facts in which I thoroly believe:

1. I believe that, as public education is a state undertaking for the benefit of the state itself, it should, so far as possible, meet the needs of all, and be so instituted and directed as to secure the greatest good to the greatest number.

2. That, if the teaching of commercial subjects is called for by any community, it should be provided in such form and measure and at such a place in the student's school life as will accomplish the most good for him.

3. That in educational matters it is the weak who need aid first, not the strong; that it is the sick who need the physician, not those who are well or able to take care of themselves.

4. That the so-called commercial branches are just as worthy subjects of study as the classics, or history, or mathematics, or science, and that, in preparation for entrance to college, time spent in careful study of these subjects should entitle the student to just as much credit as the same time spent on any other of the subjects usually taught in secondary schools.

5. That the educated teacher of commercial branches is entitled to the same consideration in the matter of salary and to the same rank as a member of a school faculty as is accorded to the instructor in any other subject.

6. That the commercial department or course of a high school should not be held to be a sort of educational catch-all, in which all the lazy and incompetent pupils may find a place.

7. That pupils of other courses should be freed from the idea that they stand on a little higher plane than the pupils of the commercial course.

8. That instruction in commercial branches should be given by trained *teachers*, not by business-men.

9. That in every public commercial course, be it short or long, the so-called commercial branches should be taught just as thoroly as they are in the best private commercial schools.

10. That, no matter what success a young man may achieve in business, no matter how rapidly he may advance, no matter whether he develops those abilities which will eventually place him in an executive position or a place of high responsibility, he must begin as a clerk in nearly every case.

"Commercial education" is a very elastic term, and it is a really difficult matter to give proper definition to the expression. It seems to be generally understood, however, that it should include as complete a mastery as possible of the English tongue; a legible, rapid handwriting; a working knowledge of bookkeeping; an ability to perform arithmetical calculations with accuracy and dispatch; an acquaintance with commercial paper and business forms and usages; an ability to take down in shorthand a letter or other matter dictated at a moderate rate of speed, and to properly understand the use and capabilities of the typewriter. With the exception of English, this includes about all there is in the course of a good business college in which four to six months might be required by the ordinary pupil for its completion. Is it too much, then, to assume that the same work can be well done in a public high school in two years, provided the classes are properly graded and the pupils have had eight years of pre-academic work? In addition to these subjects a modern language, German or Spanish, should be taken for the full two years, as well as at least one term each in civics, the history of commerce, commercial geography, natural philosophy, and drawing, both free-hand and mechanical. A three-years' course affords increased opportunity for the study of science, gives time for the study of a second language for two years, for an additional year in practical and literary drill in English, for further drill in office practice, for some work in accounting, and for the study of history.

The two-years' course here suggested will be found to be of the greatest use in our large cities, where there is certain to be a large number young people who cannot defer the active work of bread-winning for more than two years, at the most, from the time of leaving the grammar school, the average age being fifteen years. The class of pupils which such a course will attract are among the most worthy of all our young people, and if just this kind of study and training is not provided for them by the public schools they will be obliged to begin their life work handicapped for want of knowledge, thru no fault of their own. This fact has been most firmly impressed upon me by my work for many years in the evening schools of a large city, where I have been in constant contact with so many deserving young men and women who could not advance from subordinate positions because they had not been provided by the public schools with the opportunity to improve themselves in the way they needed at the only period in life when they had the time. A three-years' course, while liberal in scope and of value to those who cannot take anything better, is not to be recommended. The argument of time limit which appeals so strongly to those who would take up the course of only two years' duration will hardly apply here, for those who can give up three years for high-school study can in most cases spare an additional year for the completion of the full high-school course. We who count ourselves commercial teachers should insist that the four-year commercial course should be placed on an equality with every four-year course which the high school offers, that it should be provided with as complete an equipment as possible, and that its instructors in the technical commercial studies should be the best obtainable.

As to the subjects, I would merely suggest that the course should be so planned that wherever possible the work of this course should parallel that of the liberal course, and that in a general way it should differ from it in the amount of time devoted to some subjects, slightly in the order in which some of the subjects are taken up, in the elimination of Latin and Greek and in the substitution of strictly technical subjects in their place. With some additional business practice, such a course, it seems to me, would soon become the most attractive as well as the most useful course in the high school.

DISCUSSION

C. E. Stevens, director commercial department, South High School, Cleveland, O.—The technical studies of the commercial course in the public school should not be taken up by the pupil before he enters the high school. In the lower grades his entire time should be devoted to those studies that are recognized as being the foundation of a person's education, regardless of what special lines he may intend to follow. He has no time for special studies, nor is his mind mature enough at that age to successfully pursue them. Better, if he has to leave school when he has completed the lower grades, that he leave with a mind brought to the highest possible state of discipline than to leave with a mind imperfectly disciplined and filled with a mass of undigested facts.

A commercial course shorter than the other courses is open to four serious objections: (1) The pupils that are mentally weak will select it, voluntarily or thru the solicitation of others, and the lazy and indifferent will pursue it as the shortest and easiest way to graduate and rid themselves of the irksomeness of study. Here we have three classes of pupils who are most in need of the discipline and culture afforded by the long courses sent out into the business world with an inferior preparation. (2) The school life of a large majority of those who enter this course must terminate with the high school. If they are given a short course their technical training will be very superficial, or they will be deprived of an opportunity to pursue those other studies that would give them a mental training and culture upon which their future success so much depends. If an attempt is made to crowd all the work of a four-years' course into two years, mental dyspepsia for the pupil will be the result, and his prospects for success jeopardized. (3) The graduates from the short courses will be looked upon by the graduates of the long courses as inferiors, and an objectional class distinction will be established. (4) Many parents, in their haste to have their children earning something, will urge the short course upon them, and deprive them of one or two years' mental growth to which they are entitled. If some are compelled to leave before completing the work of the full course, the work of the long course will develop them to a fuller degree of usefulness than an inferior short course.

If the commercial course is to vary from other courses in the length of time, let a post-graduate year be added to it for those who expect to enter business life at once, and give for the additional year advanced work and original research in the customs and mechanism of commerce, banking, finance, transportation, economics, civics, industrial and economic geography, economic science, and higher accounting, allowing the pupil, under the guidance of the teacher and the advice of the parent, to specialize in his work.

The objects of the commercial course of study in the public school should be, in common with every other course, to develop the pupil mentally, train him to think clearly and accurately, bring his mind into contact with the great minds of the past and present, acquaint him with the forces that have made and are now making the world's history, and teach him the laws that govern his mental, moral, and physicial well-being. In addition to these things it should give him an opportunity to acquaint himself with business technicalities, so that he may readily comprehend the workings of the complex machinery of the commercial world and be able to take a place therein as a self-sustaining member of the community where he lives. It should also offer to those who expect to pursue a higher commercial course a preparation to enter those colleges that have arranged for such courses.

In the present formative and experimental state of American commercial education it is almost impossible to formulate a course of study that will be satisfactory and adapted to the needs of the various schools thruout the country. We cannot wholly rely upon foreign schools as our models, no matter how successful they have been or how carefully their courses of study have been planned. Our surroundings and traditions are different from theirs. In most, if not all, of the foreign countries where commercial and trade schools are in successful operation, the place of each person in the social scale is to a greater or less extent fixed by birth, and the school courses are designed to prepare the pupil for and perfect him in the sphere of work to which he was born. This is not true of the American business men and women. Their education must be broad and liberal enough to aid them in entering any line of commercial activity they may select.

The course of study presented below is designed to give as broad and liberal an education as possible when the pupil's time and maturity of mind are taken into consideration. In addition to this, it is believed that sufficient time has been given to the technical business subjects to enable the pupil to obtain a good working knowledge of them. In the teaching of the languages, mathematics, sciences, and history, it is intended that the commercial features be emphasized wherever it is possible to do so without destroying their disciplinary or culture values. On the other hand, it is expected that the technical subjects will be presented in such a manner that they will have a distinctly educational value to the pupil aside from the knowledge of the subject that he may acquire. Optional studies have been provided for those who enter college.

SUGGESTED HIGH SCHOOL COMMERCIAL COURSE

Group	First Year	Second Year	Third Year	Fourth Year
Language..........	English.........4	English.........4 Modern.........3	Eng. literature or coll. Eng......3 Modern.........3	Amer. literature or coll. Eng.........3 Modern...........3
Mathematics......	Algebra........5	Geometry.......5	Algebra and com'l arith....3	
History...........	Ancient and mediæval history.4	Modern history..4	U. S. history and civics........3	Economics and Finance...........3
Economics, civics..				Com'l law.........2
Science...........	Economic science..........3 Local industry..1	Com'l geog......3	Physics and chemistry ½ year each or prep. physics..4	Industrial chemistry or review mathematics.....4
Business..........	Bus. forms and bookkeeping..4	Stenography....4 (Typewriting extra)	Stenography....4 (Typewriting extra), or bus. practice	Stenography.......4 (Typewriting extra), or office practice

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DISCUSSION OF TOPIC, "AT WHAT AGE SHOULD THE STUDENT BEGIN BUSINESS SUBJECTS"[1]

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The invitation of your president to discuss the paper of Professor Francis reached me at the time when I was preparing a "Business Questionnaire," for the New York State Teachers' Association. I therefore incorporated among the set of questions which our committee propounded to business-men the first question of Professor Francis, viz.: "At what age should the student begin the business subjects when expected to complete a four-year commercial course?" Leading merchants, financiers, manufacturers, members of the boards of education, and other representative business-men, to the number of over four hundred, have replied.

The following table will show the results:

Age	Number in Favor	Per Cent.
10	7	2
11	8	2
12	40	10
13	56	14
14	128	32
15	63	16
16	26	7
Scattering	74	17
Total	402	100

Those reported as "scattering" failed to indicate just what age they thought desirable. Many of them stated that the "business subjects" should begin coincident with the commencement of the high-school course. A number of others were emphatic in declaring that business education should begin with the earliest age compatible with a proper comprehension of the subjects taught. One of the leading financial authorities of New York in his reply made the positive declaration that in his opinion the pupil took nothing in his whole elementary course that was not really a "business subject."

A careful study of the above table will show that almost one-third gave the age of fourteen as the proper time for the commencement of a full four-years' commercial course; one-seventh favored the age of thirteen; one-sixth the age of fifteen. Therefore fully 60 per cent., or almost two-thirds, of those replying agreed that from the thirteenth to the fifteenth years is the proper age for entrance to a full commercial course.

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[1] Professor Francis' paper, of which this is a discussion, was not furnished for publication.

A critical examination of the comprehensive course of study outlined by Professor Francis convinces me that the average boy of fourteen is fully able to cope with the various subjects laid down for the first high-school year, and could thereafter successfully pursue the various subdivisions of the successive semesters. In considering at what age the boy is to begin his course, we must have proper regard to the age at which he shall be graduated. If beyond the age of eighteen or nineteen, I fear he is too old to enter upon a business career; for, no matter how well equipped in scholarship he may be, there will still remain many things that can be learned only in the school of experience.

As to the second query, "When should the pupil begin business subjects when he is not expected to finish such a course?" we shall have trouble at the outset in determining just what we mean by "business subjects." At present the term "commercial education" is so elastic that it may include such elaborate preparation as will fit a man for a position as consul, auditor, or higher business official, or it may mean the barest equipment with which every graduate of our elementary schools should be furnished before he enters upon his struggle for a livelihood.

The modern educational reformers of business education are almost a unit in standing for a "trivium" which shall include (1) the ability to write and to speak English clearly and concisely; (2) to compute with facility and accuracy ordinary arithmetical operations, including common and decimal fractions and the applications of percentage; (3) to understand the basic principles of elementary bookkeeping.

The first two of these branches, English and arithmetic, are always pursued thruout the grammar grades, and, if the curriculum is properly interpreted in the light of modern pedagogy, the study of English will develop a love for the treasures of literature, so that if successful later on in life a business-man may rejoice, not simply in the possession of a fine library of the world's masterpieces well bound and kept in elaborate bookcases, but that he may be inspired by their true literary value and have an appreciative knowledge of their real worth.

The second of the trivium, arithmetic, must include a knowledge of the best of the short methods, not the arithmetical conundrums and mathematical mysteries of the vaudeville lightning calculator, but the sensible "short-cuts" constantly used in every up-to-date concern. All work in arithmetic must also be characterized by a thoroness which shall be complete and satisfying. The limits of my time do not permit further discussion of the whole topic. Let me, in conclusion, state a few of the truisms which are demanded by commercial education of the proper sort in both elementary and high schools.

1. If the pupil is not to pursue in a high school advanced commercial training, he should at the age of ten commence his work in business preparation. Most of the elementary studies will be found helpful, and the last year before graduation he should be especially prepared for mercantile life.

2. If he is to go to the high school, fourteen years is the proper age for beginning such special business subjects as typewriting, phonography, etc.

3. The work in English must be constant and progressive, and its aims both structural and cultural.

4. The choice of a foreign language will vary in different parts of our country. For the next few years Spanish will probably be the most necessary.

5. The work in mathematics should be based on a sound foundation of practical arithmetic, and should include algebra thru quadratics, and plane geometry.

6. The class indicated as (a) will certainly require a knowledge of typewriting and phonography, but the class indicated as (b) should take the same studies as supplementary subjects.

7. Thoroness must characterize the work done in every study, as the business-man always insists upon high standards.

8. Modern pedagogy has removed the "grind" of the old-fashioned schoolmaster, but it must not altogether neglect the importance of drill and repetition as the "open sesame" to the solidity of instruction which the business-man demands.

9. In addition to scholastic equipment, tact, common-sense, and good judgment must be the innate qualities of all candidates for business success who hope sometime in the future to become "captains of industry."

E. N. BONNELL, business department, Central High School, St. Paul, Minn.—The course of study proposed is no doubt admirably adapted to the conditions obtaining in a commercial high school. So also would it be in other high schools in which the so-called commercial department is really a department; that is, in which the commercial students are sufficiently numerous to warrant separate classes in all subjects.

Whether or not it would be advisable in the average high school so to group the four years' work as practically to make two courses, one of two years and one of four, is a question. A large percentage of those who elect the commercial work do so with the expectation that they will be fitted in a short time for a position in some business establishment. Their circumstances are such as to make this desirable, and in many cases necessary. To them a two-years' course would offer special inducements. But a considerable proportion of those who fail to complete four years leave at the end of the first year. It might therefore be argued that most of the distinctly commercial work should be put into the first year.

The fallacy of this needs little comment. These short courses have in the past been responsible more than anything else for the failure and ill-repute which have in so many instances befallen commercial departments in the public school. A still more serious objection is that one year, or two years, is too short a time to accomplish much of permanent value in both commercial and other correlative studies, neither of which may be neglected in a symmetrical education.

Too much emphasis cannot be placed upon the importance of extended and thoro work in arithmetic. If training in rapid calculation be furnished in the grades, much time may be gained, and the study of bookkeeping and the more formal phases of arithmetic may well begin early in the high-school course. But it can hardly be maintained that the average pupil brings with him into the high school much facility in the handling of figures, particularly without the aid of pencil and paper. Therefore, if the first term, or the first year, be devoted to drill work, not only in computation, but in writing as well, a serious handicap will have been removed from the pupil's progress. Moreover, the English and other subjects of the first year will contribute to the same end, the former directly, the latter by their general developing effects.

In the course under consideration stenography is taken up at the beginning. As its value lies chiefly in the direct use to which the subject itself can be put, this is advisable, perhaps, for the benefit of worthy students who can attend for one or two years only. This purpose may be served by making it elective in those years, leaving as its regular place in the course the third and fourth years. The reason is twofold. The tendency to drop out early with a smattering of business and other subjects will not be encouraged; and a better preparation, resulting from previous informational study, coupled with greater power of sustained application, will be more likely to insure success in a subject in which too few become really proficient.

Business law is a subject which may be advantageously studied with technical arithmetic and advanced bookkeeping. Much of it is quite difficult for pupils of fourteen or fifteen years of age to grasp, tho perhaps not enough so to justify detaching it from the subjects mentioned. Considered without reference to other branches, there is no doubt that it should be placed in the fourth year.

It will be seen that a postponement of a considerable portion of the commercial work to the later years of the four-years' course has been advocated. It should be remembered that this has been done with a commercial department rather than a commercial high school in mind. The reasons for favoring such a provision for commercial work shall be summed up briefly.

In the first place, this work has been introduced into the public school with two objects in view. One is the direct preparation of the student for business life, so far as this is possible in a school. The other is the discipline or culture which may be gained therefrom. If the first were the only aim, it would be logical to arrange the work so that the student could take up the strictly business branches in the last year or years of his course, hypothetically the third and fourth years, in order that such knowledge and skill as he has acquired may be turned to account before much of it has been forgotten or lost. The other object, which is never to be lost sight of even if not so prominent, does not make similar demands. Hence, if a regard for proper correlation makes the first instance impracticable and some loss ensues, it may well be counterbalanced by gain in the other.

Finally, as before intimated, the older the student the greater is the degree of proficiency he may reasonably hope to attain. Half knowledge in any subject is to be deplored, but it is doubly disastrous in those which are designed to be put to such direct and immediate use as the business branches. Maturity of mind, therefore, is peculiarly desirable in approaching such work, and should weigh heavily in arranging a course of study, care being taken always that there shall be no unjust discrimination against other subjects.

THE PREPARATION OF COMMERCIAL TEACHERS FOR WORK IN THE PUBLIC SCHOOLS

B. H. MEYER, PROFESSOR OF INSTITUTES OF COMMERCE, UNIVERSITY OF WISCONSIN

The problem of the preparation of commercial teachers for work in the public schools has grown out of the widespread demand for instruction in commercial branches which has asserted itself in all parts of the country in recent years. This demand is deep-seated, real, and permanent. It results from the realization on the part of the constituencies of our schools that the old standard courses fail in some respects to meet the needs of many pupils who are aiming for business careers, and who, because of such failure, may not enter the high school at all, and consequently remain outside of the direct influence of the atmosphere which prevails there. The establishment of commercial courses is meeting this demand and at the same time widening the influence of the high schools and increasing the interest of the community in secondary and higher education.

While this demand of the public should be met as promptly and as efficiently as possible, care must be taken not to go beyond the available resources of the schools. To throw the burden of administering commercial courses upon the existing staff of instruction, in most if not all cases already taxed to its full capacity, would be to bring the new work into disrepute and to weaken or discredit the old, to the incalculable injury of both new and old.

In the high schools in those parts of the country with which I am most familiar the majority have from three or four to six or eight teachers for all courses. In most of these schools the demand for commercial instruction must be met by having the existing staff undertake the teaching of commercial branches, except stenography, typewriting, bookkeeping, office work, and similar technical studies, which quite generally are taught by special teachers. Changes among these teachers are many and frequent, and everyone who has had anything to do with high-school administration will admit the difficulty of securing, thru a series of years, the same combination of talent in the teaching force. The smaller and more general the staff the greater becomes this difficulty, and the necessity of elasticity in courses becomes more urgent. Until the time comes when an adequate supply of properly trained commercial teachers is available, the plan under consideration may serve a useful purpose; after that it will be useless, if not worse.

In view of the fact that much of the commercial instruction in high schools must for some years to come be imparted by teachers whose best training lies in other fields, such teachers should supplement their equipment by additional courses in commerce at institutions providing such instruction. Studies like commercial geography, money and banking, transportation, insurance, materials of commerce, public and private finance must be pursued at some university; for it is university training alone which can provide that breadth of knowledge and intellectual temper which will enable teachers to bring to our high schools that quality and quantity of instruction in commercial branches which can stand out and not shrink from comparison with any other branches taught in that school. The teacher of Greek, Latin, or German can easily acquire Spanish. The teacher of science can readily equip himself to give instruction in the materials of commerce. The teacher of bookkeeping can prepare to teach accounting. The teacher of civics and economics, transportation. An enlargement of the teacher's equipment along these lines is certain to result in high-grade instruction in the schools and at the same time make of the teacher a more thoro and highly educated man. Only in instances of unusual ability and preparation in closely allied fields would it be prudent for a teacher to attempt the newer branches without special supplementary training. Most teachers, no doubt, would be able to spend one or several summers in acquiring the extra knowledge, and a teacher who has the energy and ambition to do this can generally be trusted to do high-grade work in the schoolroom.

At this point we may leave that class of commercial teachers which has been and still is being drawn from the ranks of existing staffs of instruction, and turn our attention to that more recent and rapidly growing class which has had the advantage of special preparation for work in commerce. What shall the preparation for this class of teachers be?

In the first place, I assume thoro training in non-commercial branches, such as English, history, modern languages, mathematics, and science. Too much emphasis cannot be laid on English, for nowhere is the ability to express one's thoughts clearly, accurately, and forcibly more highly prized than in business. A brilliant American essayist has said that we may study English as a history, as a science, as a joy, and as a tool. Commercial teachers must necessarily aim at the last — English as a tool — and so thoroly must this be done that pupils may learn to use this tool with the facility and efficiency of a skilled craftsman. English as a joy, as a science, and as a history should come later, altho it is sincerely to be hoped that in the preparation of commercial teachers the larger appreciation of our language may find its place. In addition to English, commercial teachers should possess a knowledge of one or more foreign languages. Spanish, French, and German sometimes have a practical value, and together with Greek and Latin afford contributory values to English, not to mention the cultural and æsthetic values which are the gifts of the languages. Courses in history supply suitable background for the study of contemporary institutions, in that they show the connection between that which is and that which has been. It is assumed that every commercial teacher has the equivalent of a high-school or academy course in Oriental and Greek and Roman history. A course in mediæval history would be valuable, but it may have to yield to more extensive and intensive work in modern history. A thoro course in modern history is indispensable. Similarly, advanced work in United States history, especially in its social and economic aspects, should constitute a part of the teacher's equipment. Being familiar with the general outlines of ancient and mediæval history, and being possessed of a thoro knowledge of modern and American history, the teacher is prepared to enter upon the study and teaching of the history of commerce and industrial history. The history of commerce and industrial history deal with facts and phenomena peculiar to themselves and having a direct bearing upon that phase of life with which the commercial teacher is to familiarize his pupils. Economic history and history of commerce possess nearly all, if not all, the merits of other historical studies. They admit of extended work with original documents and the employment of the most approved and modern methods of historical treatment. With these fields the commercial teacher should be thoroly conversant. Mathematics and science should receive some attention as a matter of outlook and general intelligence, and for teachers who contemplate teaching commercial branches resting wholly or in part upon these, thoro courses in mathematics and science should be regarded as axiomatic. In other words, the commercial teacher may be satisfied with the elements of those studies which are not fundamental to advanced work in his chosen field, but must apply himself with great diligence and perseverance to every basal branch without the mastery of which broad treatment of subsequent branches is impossible.

To industrial history and history of commerce, then, should be added studies like political economy, political science, commercial geography, the elements of finance, money and banking, exchange, accounting, and commercial law. Teachers may not always be able to study even the elements of all these branches, yet so far as this is possible its desirability will undoubtedly be conceded. For the teacher who is to take high-school classes in money and banking, for instance, much more than the elements of political economy and finance should be required, lest his instruction become lean, fragmentary, narrow, inaccurate, uninteresting, and uninspiring. In handling a subject like commercial geography the teacher is certain to come into close contact with facts the proper use of which involves a knowledge of transportation, finance, exchange, and allied fields. Correct interpretations and accurate impressions of facts is the greatest good to be derived from a study of commercial geography and similar branches. Indeed, the entire list of commercial branches will be taught effectively or loosely according to the preparation of the teacher in contributory branches.

Superintendents, principals, and school boards now generally recognize the imperativeness of a certain degree of specialization, which means concentration and intensive work on the part of their teachers. If we would avoid making our commercial courses the refuge of educational vagrants, we must at the very start make our commercial teachers the equals of the best employed in any other departments. Then instruction in commercial branches will deserve and command respect. If we fail to do so, our work is certain to fall into disrepute, commercial education will be retarded, and future progress impeded by unnecessary obstacles. I should deem it an imposition on your intelligence to enlarge upon the necessity of specialization on the part of high-school teachers, and the principle applies to commercial teachers with as much force as it does to teachers of Latin or chemistry.

The degree of specialization in the college training of commercial teachers ought to be approximately the same for all, while the extent to which the principle of specialization can be applied in the instructional work in the high school will generally depend upon the size of the school and the number of the instructional force. Teachers who are well up in their mathematics, physics, and chemistry can best be intrusted with instruction in materials of commerce; those who have had thoro courses in economics, industrial history, finance, and banking can give instruction in the financial aspects of corporations; those who know a good deal about administration, political science, and jurisprudence would naturally be assigned to classes in commercial law. By following rules of this kind the teachers will be employed to best advantage, and pupils will derive the greatest possible benefits from the instruction they receive. We cannot protest too strongly against any arrangement which places the administration of commercial courses in the hands of teachers who have not had thoro college courses or their equivalent in the important commercial branches. No matter how willing or how able, can the most talented teacher, splendidly equipped in physics, chemistry, botany, and mathematics, do successful work in finance and accounting without additional special preparation ? A negative answer is self-evident.

The purely technical branches, like bookkeeping, stenography, business arithmetic, and accounting, important and valuable as they are, should not constitute the major portion of the preparation of the commercial teacher, except, perhaps, of teachers in typewriting, stenography, and other technical branches. These branches lack the necessary intellectual content and definite body of knowledge which a training course for teachers should embrace. A teacher's course largely made up of such studies would be an intellectual weakener, and fail to give that power of analyzing and balancing facts which is so essential to good teaching in commerce, as well as in other branches. It is obvious that a person who is a bookkeeper, an expert stenographer and typewriter, and who has had wide experience in business, might become a most valuable instructor in stenography and business methods, but would certainly fail when intrusted with the teaching of other commercial branches without special training. Practical experience may be a most valuable aid, and may rightly be considered in the selection of candidates for teachers' positions, but it can never take the place of systematic and thoro training along commercial lines.

"Commercial branches" have been spoken of repeatedly, and it behooves us to consider their nature with reference to the preparation of commercial teachers. Taken collectively, commercial branches may be characterized as studies in an inchoate state; they are in a process of becoming. Many of them lack that definiteness and completeness which has long been associated with the multiplication table and the nominative case in Latin. These are what they have been, and what in all human probability they will remain. Commercial geography, corporation finance, parts of transportation, industrial history, and other subjects have not yet been codified, to use a legal term. Several excellent books covering parts of these fields have been published, but, speaking generally, much of the instructional work must be done thru the agency of material collected and selected by the teacher. The teacher must, in a measure, compile text-books to supplement existing volumes by material collected from a variety of sources. The teacher of commercial branches is dealing with a number of subjects which are continually changing, and the successful handling of which requires an intelligent use of contemporary publications, especially financial, trade, and other journals, government documents, and transactions of learned societies. An important part of the preparation of a commercial teacher must consequently consist in acquiring a familiarity with, and a critical judgment of, these publications. The United States government is daily placing at our disposal storehouses of facts which are invaluable in gaining a knowledge of the business world. I need only mention the census, the treasury bureau of statistics, the isthmian, industrial, and interstate commerce commissions, the Smithsonian Institution, the department of agriculture, the treasury, etc., and you will know what I mean. There exists no short road to these things, and nothing but years of incessant labor will cause these treasures to yield their gold. Foreign governments and societies, likewise, make many valuable contributions, and in the use of them the teacher's knowledge of French and German becomes indispensable. The high-school teacher may rarely be able to utilize much of this material directly in the class-room, but a familiarity and close touch with it will give him a broad background and fullness of knowledge which will raise his class-work above the commonplace and the mediocre, and impart to his pupils that intellectual curiosity and investigating spirit which constitutes a large part of higher business careers.

The pedagogical side of the training of commercial teachers requires little attention, except to say that every teacher should have some knowledge and appreciation of the problems of the schoolroom before beginning to teach, and to familiarize himself with the best literature on the subject. A teacher who has received the kind of training described in this paper has little to gain from a formal study of methods of teaching, especially in their application to particular branches. The best method is the application of good sense to a concrete situation. A man lacking good sense should not become a teacher.

There are, perhaps, few things which so accurately and so justly divide men into classes as the attitude of mind which they habitually take with respect to persons and things with which they come in contact. The difference between the large business man and the man in business, between the chief and the subordinate, between the successful and the unsuccessful, between the congenial and the disagreeable, lies largely in this attitude of mind. The desirable attitude of mind practices toleration. It sees things in the large and with a clear eye. It seizes upon essentials. It sees relations. It weighs and it balances. Having done this, with a masterful hand it decides upon a line of action and pursues it with vigor and aggressiveness. Commercial teachers are daily dealing with large interests; they live in a world of great plans and deeds; they look at the world as it is. How supremely important, therefore, is the cultivation of this attitude of mind in the training of commercial teachers!

REQUIREMENTS FOR ACTUAL BUSINESS

GEORGE A. BOOTH, PRINCIPAL OF THE BOOTH PREPARATORY SCHOOL,
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The most serious fault in our present school organization is the total lack of any sort of adequate training for business. While for every profession in our country schools of undoubted worth are established and maintained either at public or private expense, the preparation for commercial pursuits has been practically neglected. This surely discloses a weakness in our civilization.

If we gauge the importance of a subject by the prevalence of its use, we must conclude that the present subject does not belong in the secondary place to which it is relegated. This is an age of tremendous activity, of combinations of capital and enterprise far beyond anything ever dreamed of. On all sides we see evidences of the effect of system and organization brought to a perfection which alone renders such undertakings profitable, and the business of this country rapidly becoming a world-power in all that the expression can mean. More than armies or navies the business enterprise of our citizens is destined to form both offensive and defensive alliance with the world at large. These vast undertakings are controlled by business men. Some of these represent university training as well as commercial, but the latter is the more important part of the whole. As compared with the graduates of our common schools, the number of university men in the business world is exceedingly small.

The great mass of business people have had neither the time nor the means for more educational advantages than are offered by our public schools. To our public schools, then, we must look for the men who shall in the future not only sustain our present supremacy, but actually advance it. This being so, is it not well to inquire into the training of men in whose hands are to be placed such enormous responsibilities? How shall we prepare them so they will be best equipped to grapple with the difficulties which must be met in this world called "business"? Note the results of our present system. Every year thousands of boys and girls come from our schools and knock for entrance into this business world. They fail wretchedly. The boy or girl graduate from our public schools who can spell is a rarity. Not one in ten can foot a column of figures correctly or perform the elementary problems of percentage. Formal grammar has practically disappeared, and penmanship is becoming unknown. I ask you, is this the proper elementary training for a business career? We have been told again and again that the public schools are to give general, not special, instruction, but as the majority of pupils receive no further instruction than a preparation for a future college course, does it not seem to be necessary to specialize to some extent?

A walk down one of the principal streets of this city will show names over the doors of a large majority of business houses that are anything but American. Again, investigation will prove that the heads of the various departments of our large manufacturing and mercantile establishments, and those persons drawing large salaries and assuming large responsibilities, are foreign born. These facts should suggest a question to our educators as to which is the better general training. In European countries a boy is thoroly taught arithmetic and writing, two of the essentials in a business education. In America a boy is taught a little of everything, not much of anything, and considerable of nothing.

It would seem, then, that the present public-school grammar course as a fundamental training for a business career is open to serious objections. The most prominent of all I believe to be the free text-book system, by which the pupils are furnished, not only with text-books, but with materials in the shape of pencils, paper, erasers, etc., free of charge. After years of observation of this free text-book system, I say without hesitation that it inculcates carelessness, wastefulness, and actual dishonesty. Whatever its advantages, it seems to me the detriment that comes from the benumbed sense of the value of property more than overbalances them. I know of no firm or establishment so rich or prosperous that it can afford the luxury of careless, wasteful, incompetent, or dishonest employes. As we advance in years we value most highly the things that are obtained with most difficulty. The boy or girl must learn early in life that nothing of value is procured without effort.

Not enough emphasis is placed upon accuracy. The people of the United States are annually throwing away thousands of dollars in postage, and millions of pieces sent thru the mails never reach their destination, merely because we were not trained and made to feel the essential quality of business accuracy and care. In 1900, more than seven million drafts, notes, and other valuable papers of a face value of more than ten millions of dollars were found misdirected in this way.

As superintendent of large manufacturing establishments, it was my duty to employ a large number of men, women, and children, and I desire to call your attention to the equipment of the average young lad seeking a position. In arithmetic he is slow and inaccurate, a poor penman, a bad speller, and from early training wasteful in habits. He is, however, equipped with some sense of form and color, knows a little about free-hand drawing, has a smattering of science, can draw his letters beautifully, can explain the operation of square root and illustrate it with blocks, knows how to calculate various areas and volumes, but can rarely obtain the correct answer. The result of it all is a superficial instead of the genuine knowledge which business life demands. This was my experience during ten years, and every business-man with whom you may talk will substantiate what I have said.

Let us contrast the above with the acquirements of the ideal commercial graduate who will make the successful business-man. He, first of all, is noted for absolute integrity; he does not under any circumstances misrepresent facts; he is always punctual, makes no engagements he cannot keep, and keeps all the engagements he makes. He is courteous to all, a tireless worker, and a deep thinker. As a student of economics he knows well the laws of supply and demand, is thoroly familiar with the principles of division of labor, and realizes fully that profits arise as much from saving expense in handling and manufacturing as in the high price secured for his products. He is a well-read man, thoroly acquainted with the geography of his own and other countries. He is not necessarily a profound mathematician, but his work in arithmetic is always correct. Withal he is a progressive, wide-awake business citizen.

To secure the desired result we can make a new curriculum or change the old to overcome the faults. We can arrange a course of study in our public schools and high schools to meet the business demands, and, if necessary, make it obligatory, but what shall we do with the private schools? I mean those establishments dignified by the name of business colleges, with which you are all more or less familiar, and which are conducted by men who have limited education or business experience?

The lawyer who would attempt to practice in court without first producing his credentials is quickly called to account. Law demands that any man who desires to practice medicine must produce evidence of a thoro knowledge of his profession. But in the business world anyone may organize and conduct a business college. With a comparatively few notable exceptions, the business colleges of this country are in the hands of incompetent men, whose sole excuse for occupying so prominent a position in the public eye is a superabundance of self-conceit and assurance. Complete courses of business training, with a guaranteed position at the end of three months, are extensively advertised. This is so manifestly absurd that it is not surprising that business people look with suspicion upon such graduates, who reflect discredit even upon those business institutions whose finished work is as valuable as that furnished by the best universities in the land. Nothing hinders the enriching of the commercial course so much as these money-making schemes, which entice the poorest material and turn it adrift upon the commercial community in the briefest possible time. To assume that a business course can be completed in any less time than is required for any other course is to assert that the carrying on of the tremendous enterprises already mentioned is, after all, no great affair, and is little worth the attention of the scholar and the thinker. Against this we must protest most vigorously, and seek by every means in our power to put this business education upon a higher plane. While these imposters are advertising their three-months' course, let us emphasize the necessity of a four-years' preparation, and let us seek the help of all true citizens, all true educators, and, if need be, the majesty of the law, to bring about a state of affairs wherein a man uneducated in proper channels can no more teach in a commercial school than can an ignoramus teach in an established university.

It has been found that many of the pupils of our commercial courses at the end of the first, second, or third year are lured away to "finish," as they call it, in these colleges. Their personal loss they are too ignorant to perceive, but they soon find themselves mere machines, worth just as much to their employers as the limited amount and low grade of work done. Then the deficiencies of hurried training are only too evident, and so great as to discourage ambition.

This tendency should be taken into consideration, and the four-years' course be so arranged that bright and studious pupils, by special work, may complete it in three years. At the same time it should be presented as a unit, and the correlation and relative importance of the studies shown from the beginning.

As a definite commercial course equivalent to any other course of study in the high school, and whose aim is the cultivation of reasoning powers, judgment, observation, and character building, I suggest the following:

First year	Second year	Third year	Fourth year
English 5	English 5	English 5	English 5
Latin 5	German 5	German 5	Spanish 5
Com. geography . 2	Algebra 2	Plane geometry .. 2	Political economy.. 2
Com. arithmetic.. 3	Chemistry 2	Commercial law.. 2	Physics...........2
History 4	Bookkeeping.....5	Civics, stenography and typewriting.........5	Stenography and typewriting 5
Penmanship 1	Penmanship 1	Penmanship 1	Penmanship 1

The basis for all superstructure is English. This includes English grammar, rhetoric, literature, and a daily exercise in spelling. The grammar and rhetoric, upon which too much stress cannot be placed, should be logically and practically treated. Frequent exercises in composition should be given to secure easy, rapid, and accurate expression of thought in adequate language.

In order that the modern languages, German and Spanish, both of which are today used extensively in business circles, may have the necessary Latin as foundation, this is placed in the first year, followed in the second and third by German and in the fourth by Spanish. A speaking knowledge of these two languages is desirable.

For mental discipline, algebra and plane geometry are given in the second and third years. Of the two sciences, chemistry is placed in the second year and physics in the last. Since chemistry is largely a memory study, an observation of phenomena, and a recording of facts, it naturally precedes physics, which calls much more upon the reasoning powers.

Commercial law, so far as it relates to commercial paper, bank customs, taxes, international revenue, imports, and exports, should be carefully taught, and also a thoro course in civil government, for one must not lose sight of the fact that the commercial students of today will be our merchants of tomorrow, who will govern our municipal affairs. While we are making business-men we are making the class of citizens of whom we, as a nation, are proud.

Stress should also be laid upon the study of commercial geography, for a person in the business world needs a thoro knowledge of the products of the world, how and where produced, and thru what channels secured, the available amounts or quantities, and the different grades and prices.

As to mathematics, I should have the graduates really expert in the manipulation of figures in ordinary operations, such as the four fundamental rules and the principles of percentage and interest. This can result only from continued practice. I should also have the graduates easy, rapid, graceful penmen and good spellers. Accuracy in spelling, by whatever means acquired, should be acquired.

Such a four-years' course is of sufficient duration to afford a thoro and liberal education and equip the pupil with the power of instant concentration and correct judgment. While aiming at the technical equipment we do not sacrifice to it the general knowledge of cultural training, for this would mean new additions to the ranks of narrow business-men, to whom success is merely the ability to acquire money, and business only a means to this end.

If our aim is to be the symmetrical unfolding of the mental faculties, we must depart from the narrow, well-worn grooves in which we have run so long ; we must strike, and strike hard, for a system of commercial education so broad and complete that our graduates will be eligible for any positions naturally open to them. Such an elevation of the standards will soon prove an inestimable benefit to the country, for its results will be the thoro equipment of the thousands of young people who have energy and perseverance, but whose minds, altho capable of much, are going to waste for lack of any adequate system of business education.

DISCUSSION

TEMPLETON P. TWIGGS, director of commercial department, Central High School, Detroit, Mich.— In giving the requirements for actual business, I would place first a willingness to work, work, and, I might again add, work. By that I mean a willingness on the part of the individual not only to do what he is told to do, but also to do anything he sees that ought to be done, and to do it as well as it can be done, or as well as the doer's ability will permit. What we need to teach is the nobility of labor in any capacity, and the absolute necessity of it — the practically immutable certainty of not succeeding or even "getting along" moderately well without it. Just as soon as the pupil is made to comprehend that he must "get ahead" by his own effort, and by that alone, just so soon will he be prepared for actual business. One who is willing to work, tho of medium ability and little training, will succeed better than the best trained of ample ability with ambition and energy lacking.

Now, as to further requirements of actual business: First, the business must be in competent hands, and we are perfectly safe in saying that nothing less will answer. Hence the best course of study is the one that develops the power of thought, teaches self-reliance, gives a broad intelligence, and impresses the absolute certainty of the rewarding of well-directed industry. If this is fully comprehended, successful preparation for actual business is well begun.

As to what will produce this condition of affairs, and the nature and variety of training required:

One of the greatest weaknesses of our present school system in the grammar grades, the real preparatory school, is the utter lack of training in independent thought and action, the very thing always in demand in business life. What is of more assistance to the captain of industry than to know that when he gives an order it will be carried out to the letter, intelligently, promptly, and faithfully? What more handicaps him than to know that if his instructions are carried out at all it must be at the expense of constant supervision, and constant supervision is expensive and exhaustive of profits.

At what time can these habits of self-reliance, honesty, industry, and a proper regard for authority be best impressed upon the mind of the young? It cannot be begun too soon. When children are carried along thru school with the least effort on their part, what can be expected of them when the time comes that they must do for themselves? In fine, unless they are taught, thru the formative period, to be self-reliant, industrious, and respectful of authority, how can they, when they come into the presence of the employer, be expected to practice at once all the commendable virtues to which they are strangers?

Of almost equal importance with industry as a requirement I would place courtesy and respect for those in authority. No one thing commands recognition more readily than a courteous and respectful demeanor at all times and under all conditions. Do we not fall short in preparing for business if this element of success is not given its share of attention?

What is needed is the person, young or old, who *can* do things and *will* do things without the spur of necessity or fear of dismissal as the only incentive that makes him exert his powers.

This incapacity for independent action, this moral stupidity, this infirmity of the will, this unwillingness to cheerfully catch hold and lift, are the things that cause so many failures, and we, as teachers, should make this feature of self-help prominent, if not foremost, in all our instruction. Particularly is this true as a consequence of ever-increasing competition.

Concentration of mind with its attendant result of accuracy is another demand or requirement for a business career, and with these go orderly and systematic habits, qualities that are all too often lacking in our later-day teachings.

Self-respect goes along with the others as a sort of armor. While appearances are more subject to being counterfeited, the genuine article is an excellent commodity. "Of course, when a fellow gets to the point where he is something in particular, he doesn't have to care because he doesn't look like anything special; but while a young fellow isn't anything in particular it is a mighty valuable asset if he looks like something special."

The effect of private business schools cannot but be for the best, as they must perforce keep the mind of the pupil on those qualities that make for success in a business career. What the "business man" expects, and will demand, is kept constantly in view. But the real preparation, lasting and substantial, must be laid on a broader and deeper foundation. Broaden the curriculum, take in the studies that broaden the mind and give a capacity for a comprehensive view of affairs, even unto the world-wide view, for with such must the future captain of industry deal. A too thoro English training cannot be insisted upon. History is of great value, and mathematics are absolutely essential. Then the regular commercial studies, with commercial law, economics, and commercial geography, come in as matters of necessity.

BUSINESS EDUCATION

J. M. ANDERSON, PRESIDENT METROPOLITAN MUSIC COMPANY, MINNEAPOLIS, MINN.

Prior to the Civil War we were an agricultural country. We had scarcely made an impression in the manufacturing and commercial world. Our whole industrial system was crude and primitive as compared with today. With the exception of our railroads, we had no great corporations, as we now understand that term, and even these represented but insignificant accumulations of capital.

The small merchant at the crossroad was at once producer, manufacturer, and distributor, furnishing the raw material, producing the finished products, and sending them into the market.

Our vast public domain west of the Mississippi was almost untouched. In the eyes of Europe we were an isolated, undeveloped nation of uncertain future, unimportant in the great world-movements of commerce. From our Civil War we emerged with the eyes of the world upon us, slavery abolished, and the stability of republican institutions forever settled. A new era of invention was already dawning, and this led to development and expansion beyond the wildest dream. This we shared in common with the nations of Europe. The world noted in us the beginnings of new life, energy, and development. Whereas, from 1789 to 1876, or practically the first century of our history, our imports exceeded our exports by one thousand millions of dollars, from 1876 to 1897, or twenty-one years, our exports exceeded our imports by four thousand millions, and from 1897 to 1902, or the past five years, our exports exceeded our imports by two thousand six hundred millions.

Our industries may be classed under three general heads: production, manufacturing, and commerce, or interchange of commodities. In each of these we are now the dominating factor among the nations. An unparalleled immigration followed the Civil War, rapidly settling our western states, and the product of our mines and farms doubled again and again, until at the present time, with but 5 per cent. of the world's population, our mines are producing 39 per cent. of the world's minerals, and we are cultivating one-fourth of the cultivated land of the earth. We contribute 23 per cent. of the world's agricultural products, or more than four and one-half times as much as our proportion of population. We supply 34 per cent. of the world's manufactured goods, or nearly seven times as much as our proportion of population. (Henry Gannet, in May *Forum*.) In manufacturing our standing is: United States 100, England 44, Germany 35, and France 30. Thus it will be seen that our manufactured products exceed by more than 25 per cent. the combined products of our two nearest competitors.

In foreign commerce we rank third. The relative positions of the three leading countries may be represented as follows: England 18, Germany 10, United States 9. (Professor Monaghan, United States Consul, Chemnitz, Germany.) Our ocean tonnage already outstrips all continental powers, and ranks second only to England.

We have in operation two hundred thousand miles of railway, or more than the entire continent of Europe, and our railways give employment to more than one million men. Of the six billion dollars annually earned in transportation by all nations, we are now earning 34 per cent., or nearly double the earnings of England, our nearest competitor.

It may be asked what all this has to do with education. Indeed, our unrivaled successes are sometimes urged as evidence of our superior training, and have led to the belief that we have little to learn. It is not strange that we have failed to note the need of better preparation for the new problems imposed by our stupendous growth, or that we have indulged in self-adulation, attributing our marvelous success in the great struggle of nations to our superior intelligence and skill. We hear much of Yankee ingenuity, and plume ourselves upon the brilliant achievements of our manufacturers and merchants. We have come to believe that all this unexampled prosperity is due to the special skill of American workmen and the superiority of American methods. No greater fallacy ever threatened the prosperity of a nation or pointed the way more unmistakably to sure defeat. We have persistently ignored other easily discoverable causes of our prosperity. Let us look for a moment at conditions as they actually exist.

Our rapid growth, commanding world-wide attention, dates from about the beginning of the last quarter of the nineteenth century, or from the beginning of that era of invention to which I have referred. The partition of Africa had not yet begun, in fact that continent was still unexplored; the dominion of Canada was in a very real sense yet unpeopled; Australia was as yet but a continent of struggling colonies, and the great domain of Russia was practically still unknown to the outside world. Thus it will be seen that until a comparatively recent date we have enjoyed the unique distinction of being practically the only source of the world's supply of raw materials. Providence has furnished within our borders practically every element that enters into our leading manufactured products. England, on the other hand, has been forced to buy and pay freight upon practically every pound of material going into her great factories, and the same thing, to a less extent, has been true of Germany and France. The advantage we have reaped in this matter can hardly be overestimated. The American farmer cultivates on an average forty-four acres, his produce having an annual value of $900, as against thirteen acres for the French farmer, with a value of $580, and eight acres for the German farmer, with a value of $510. Thus the superior methods of the German farmer produce more from one acre than the American produces from three. With the early disappearance of our free lands, and the progressive reduction of the area tilled per man, we are gradually losing our capacity for production as at present compared with the continental farmer. In fact, we have already begun to realize the new competition of the vast domains of northern Russia, western Canada, and Australia. Each year must emphasize the consciousness that we are no longer the world's only source of the supply of agricultural products and other raw materials.

A second advantage contributing largely to our unrivaled advancement in manufacturing lies in the fact that, as a new country, we were not fettered by traditions or prejudices. Our shops and factories, our whole industrial system, is of recent development, insuring newest types in equipment and most modern and improved methods. Europe, on the other hand, is passing thru a transition period bound by established customs and loaded down with equipments too obsolete to permit of largest results, and yet too valuable to be discarded.

Much—I think I may say most—of our success in our world competition can be traced to the two causes just enumerated, namely, free raw materials and newest equipments.

It is time that we were disillusioned in these matters. Europe is waking up. England, Germany, and France are putting on modern ways and adopting machinery and equipments of the very newest types. They are discovering the secrets of our advancement to the first place in the world's trade. In the two elements (raw materials and new equipments) contributing most largely to our advancement our wings are already clipped, and we are to be increasingly fettered until in the not distant future we shall be wholly stripped of our advantages arising from these two sources. When deprived of our advantage in method, equipment, and raw material, we must stand on an equal footing with our competitors across the water, and we shall then be thrown back upon the efficiency of the individual artisan, and our supremacy must be held, if at all, by his superior intelligence and skill.

It is significant how England, Germany, and France have met our menace to their industrial development. Denied the advantages which we have enjoyed in cheap materials and modern equipments, they have addressed themselves to the scientific study of their varied industries, and have established technical schools, bringing to bear upon their industrial systems the world's highest scientific knowledge and skill.

Germany offers the most forceful example of what can be accomplished in this way. Thru wise commercial legislation and the fostering of technical and commercial education in the empire, Germany has been forged into the very front rank of industrial nations. This has been accomplished chiefly in a little more than a decade. Unless we follow a similar course, it is questionable if we can hold our present position in the world's market.

We hear much about our present industrial system eliminating the need for intelligent operators and reducing the artisan to a position calling for no responsibility or intelligent action. We hear of the operator being "chained to his machine" and becoming "an unthinking automaton," of the great aggregations of wealth denying the individual worker the privilege of rising, etc. No greater fallacy was ever enunciated. In no age have we needed greater intelligence or moral responsibility. There was a time when it could be almost literally said that every man looked after his own affairs, superintended his own business, and in large measure executed his own orders and wishes; but with our increasingly complex industrial organization it is literally true today that the business of the country is transacted by paid helpers. The tremendous interests involved are henceforth to be cared for by clerks, operators, superintendents, and managers who have no direct interest in the enterprises for which they strive, except the consideration of salary. Our industrial conditions demand a higher average of desseminated intelligence than ever before, and conditions which confront us demand that we adopt, and at once, the special educational methods which are rescuing England, Germany, and France from threatened commercial extinction and holding them in the front as our powerful and successful rivals.

It cannot be disputed that, in view of our recent national expansion as a result of the Spanish war, our destiny is to be determined largely by our relation to the world's markets. Thirty years ago this would have been heresy; today it is accepted without argument. Our manufacturing and commerce are to play an ever-increasing part in our national prosperity. To neglect or retard either invites national disaster. To state it in positive, rather than negative, terms, there is no more imperative duty confronting the American people than the instant establishment of conditions which shall not only conserve, but develop to the highest point of efficiency, the three great fundamentals of our future prosperity, namely, production, manufacture, and commerce.

We should have in every state in the Union complete consecutive courses of technical education as easy of access as the conventional courses of public schools today. Most of our states are now offering complete facilities for the young men who wish to enter the learned professions. In view of new conditions, and our rapidly widening national horizon, are these more important in their bearing upon our future than the intelligent fostering of our productive forces? What are we doing for the young men whose tireless industry is working out our national destiny? Statistics show that in the year 1900 there were but 190,000 young men and women enrolled in the business and commercial colleges of the whole United States. Of the male population engaged in gainful occupations in this country, only a little more than 1 per cent. are in the learned professions. (United States census, 1890.) The other 99 per cent. find their way into and are absorbed in our industrial system. For this 99 per cent. we provide the common schools and our colleges. It is safe to say that at least 95 per cent. never get farther than the common schools. Aside from a very few technical courses, such as engineering in its various branches, we are doing practically nothing in specialized education for this great mass of workers who are to be the determining factor in our national prosperity.

In every line of business the ceaseless quest goes on for better help—for men of trained hand and brain, for men of exact knowledge who can deliver the merchant and manufacturer from the slow and wasteful process of education thru which his helpers and operatives must pass. Every man in business knows that the problem most difficult of solution is the procurement of competent help, and that the growth of his business is to be determined largely by his success in solving that problem.

Every state in the Union should provide for her sons and daughters the highest possible form of instruction adapted to the special industries of that state, and should open free to her citizens the opportunity for highest possible attainment in these special lines. This technical and commercial instruction might begin, say, in our high schools, the courses to be elective, and to lead directly to departments of commerce in our great universities, so that the young man who plans to enter the great mercantile institution, or to engage in railroading, commerce, or manufacturing of any kind, may fit himself with all the accurate scientific knowledge obtainable bearing upon the special department of usefulness which he purposes to enter. Divorced from sentimental reasons and placed upon purely economic grounds, no better investment can be made by any state. A single illustration will suffice to emphasize this point.

Some years ago the state of Minnesota established a practical school of agriculture in connection with her state university. The young men were instructed in such subjects as plant breeding, chemistry of soils, chemistry of food, care and breeding of stock, dairying, the study of grasses, blacksmithing, carpentering, etc.; and the young women in cooking, sewing, etc. In the one item of dairying the state has probably been repaid for its expenditure. Ten years ago Minnesota was not a dairy state. Today she has 600 creameries, most of them the result of instruction and encouragement from the agricultural school. Minnesota dairy products have recently taken a larger percentage of prizes than similar products of any other state at fairs and expositions where in some cases nearly every state in the Union competed. At the Omaha Exposition she won more than 50 per cent. of all prizes against all competitors. Her butter leads as to quality in eastern markets, and even in London. In one instance a large New York dealer offered to take the entire output of one of Minnesota's largest creameries and to pay a cent and a half a pound more than the highest market price. The marked improvement of both quantity and quality of the state's agricultural products is repaying her many times over for the cost of maintaining this school.

What Minnesota is doing for her farmers every state should do for its leading industries. Every distinctive industry should be fostered at public expense, under conditions making these advantages attainable to the humblest and poorest citizen without money and without price.

In its last analysis the prosperity of the state must rest upon the intelligence of her citizens. If that intelligence be so fostered by the state as to contribute directly to her capacity for production, she has at once served the best good of her citizens and her own highest interests. The best type of service is that which results from genuine interest. The drudge who follows a daily round of toil having for him no fascination or absorbing interest is wearing out an existence but little removed from slavery. The seeds of unrest and anarchy are easily planted in such soil, but the hand that is driven to the commonest labor by an enthusiastic intelligence is seldom raised to destroy the fruits of that labor. The highest interests of both individual and state demand that our present educational systems be so expanded as to embrace most thoro and comprehensive industrial, commercial, and technical instruction. Our failure to recognize this imperative need must greatly impede our splendid progress toward the world's industrial supremacy, if indeed it does not lose for us the position we have already attained.

A PRACTICAL COMMERCIAL COURSE FOR A MASSACHUSETTS HIGH SCHOOL

E. E. GAYLORD, DIRECTOR COMMERCIAL DEPARTMENT, HIGH SCHOOL, BEVERLY, MASS.

Massachusetts is a thickly populated state. Manufacturing, jobbing, and transportation are the leading industries. Those young people who do not go from the high school to college go largely to the factory, the store, and the business office. Only insomuch as these conditions differ from the conditions in other states need there be any difference between the commercial course in a Massachusetts high school and the commercial course for a high school in any other state.

Remembering, then, the conditions to be met, the following outline is suggested for a commercial course for a Massachusetts high school:

	Required Studies		Elective Studies	
	Prepared Recitations	Unprepared Recitations	Prepared Recitations	Unprepared Recitations
FIRST YEAR	Arithmetic....5 English......4 Com'l. geog...3	Penmanship and spelling....... 3	Spanish.........4 Physical geog....3 French..........4 Algebra.........4 English history..4	Drawing........1 Music...........1 Debating........1
SECOND YEAR	Com'l law....2 English......4	Bookkeeping and intercommunication business practice.......10 Penmanship and spelling....... 3	Physiology......4 Spanish.........4 Botany..........3 French..........4 History: Greece and Rome 4 Plane geometry..4 German.........4	Drawing........1 Music...........1 Debating........1
THIRD YEAR	Civil government and elementary economics......3 Correspond'ce.2 Commercial English........3		French..........4 German.........4 European history.4 Physics.........4 Shorthand......5 Solid geometry...4	Drawing........1 Music...........1 Penmanship and rapid calculation.1 Typewriting.....5 Parliamentary practice........1
FOURTH YEAR	Commercial English.....3 History of commerce.......2	Office practice.. 5	German.........3 U. S. History....3 Geology.........4 Chemistry.......4 Shorthand.......5	Drawing........1 Music...........1 Penmanship and rapid calculation.............1

In preparing a commercial course for a high school, it must be remembered that the training to be derived from it is to give the pupil a special fitness for entrance into business life, but that, unlike the private business school, the public high school must do foundational work. Two extremes must be avoided. The technical commercial subjects must not be so much diluted that the pupil shall enter the business world with no appreciable advantage over his schoolmate who took the scientific or classical courses and then began to work in a business office. On the other hand, the course must not be narrowed to the limits of that given in the average private business school.

The graduate from the commercial department of a high school ough' to be able to compete favorably with the graduate of a good commercial school for a business position. It is on this theory that the accompanying outline was prepared.

The subjects are divided into two general groups, required and elective. The former includes the usual commercial branches, excepting shorthand and typewriting. The elective group includes subjects so arranged as to make it possible for a pupil to carry, parallel with his strictly commercial studies, a course in history, language, mathematics, or science, together with some subjects of a general character.

The outline is based on a week of twenty-five possible recitation periods. The minimum requirement is fifteen periods of prepared work and five periods of unprepared work. No home work is to be allowed in bookkeeping. Elections are to follow a definite plan thruout the course. Two periods of unprepared work should be accepted as equivalent to one period of prepared work.

Because spelling and penmanship are not taught satisfactorily in the grammar schools, considerable attention is given to these subjects in the foregoing outline. Both of these subjects ought to be completed in the grammar schools, but they are not, and must therefore be taught thoroly in the high school.

English is required in every year, because of the fundamental character of its relation to the other subjects of a properly arranged commercial course. The first two years of this subject are not to differ from the regular English teaching in the high school, but the last two years should be differentiated from the English of the college preparatory classes, more attention being given to composition and the mechanical features of writing. Much dictation involving business terms — not necessarily correspondence — should be given to the class, with careful correction of the transcripts, the essential purpose being to teach the pupil to prepare a perfect transcript and to set forth his own thought effectively.

The arrangement of bookkeeping, shorthand, typewriting, and office work is intended to hold pupils thru the four years of high-school work. Intensive work in bookkeeping is highly desirable. The work in bookkeeping and business practice is therefore concentrated into one year. Two consecutive periods daily are allowed in order to save the loss of time and energy in getting out, arranging, and putting away the necessary books and papers, and in getting hold of the work in hand.

Pupils should be taught how to journalize, post, take a trial balance, classify accounts, make a simple form of balance sheet, and close a set of books before they are required to perform any work in business practice, so called. With such a foundation, some one of the several systems of business practice requiring dealings with imaginary persons should be used, but only long enough to familiarize the pupil with common business forms. This training can be followed in the last term by no more inspiring work than intercommunication business practice, in which the pupils of several schools should deal with one another, actually carrying on their transactions thru the United States mail. The pupil at the close of the second year in the high school should be able to keep any ordinary set of books.

Shorthand and typewriting are made elective because they are subjects not indispensable to a good business education, and furthermore because they are worth practically nothing unless mastered; and some pupils cannot master them.

In the third year a sound foundation in the principles of shorthand should be laid, with but little dictation. In the fourth year, accompanying a continual review of principles, the pupil should get dictation until he can write readable shorthand at from one hundred to one hundred and twenty-five words a minute.

Typewriting should be taught by the all-finger method, or "touch system." No pupil should be allowed to do general work for anybody during the first half-year. The class should receive a great deal of dictation at the machine. They should be given plenty of work requiring the use of the hektograph, the mimeograph, and the neostyle, and every pupil should become proficient in making carbon duplicates, in taking perfect impressions in the letter-book, in the use of the tabulator, and the various methods of indexing and filing, including card work.

It is a mistake to put shorthand in the earlier part of the course on the theory that the pupil can make shorthand a useful substitute for longhand in taking notes in class. It should be studied, as a rule, only by those who expect to use it in a business way *after* the close of school. Both shorthand and typewriting should be so placed in the course, and should be given time enough, that the pupil who takes those subjects may derive from them practical as well as disciplinary value, and be, when school closes, at his very best in writing and transcribing shorthand.

One of the important objects to be kept in mind in arranging a commercial course in the high school should be to persuade young people to remain thruout a four-year course. In many instances, putting shorthand and typewriting early in the course will result in their leaving school as soon as they have done the required work, to try to get positions as stenographers; or they will quit early in the course to go to a private business school where they will probably not have to take the indispensable English that they dislike, and where such cultural subjects as geography, history, language, and literature are rarely heard of.

Business correspondence should be taught as a subject distinct from English.

Commercial law should be taught from some simple text-book adapted to the immature minds of high-school pupils, and attention should be directed largely to contracts and negotiable paper.

Civil government should be presented from the practical, rather than from the historical, point of view. It is better that a boy know only the organization and operation of town government than that he know only its origin and the conditions under which it has been developed.

It seems that at least the primary principles of the science of political economy should be taught to pupils in the high school.

Commercial geography is one of the most valuable of the informational subjects, and should occupy an important place in every commercial course.

The history of commerce, because of its close relation to commercial geography, may well follow it. It is here placed in the last year in the outline, in order that, at a time when the pupil will be best able to appreciate them, lectures may be given on various phases of present-day commerce by able men engaged in the work.

In the outline herewith, commercial arithmetic is placed earlier in the course than is altogether desirable, because the later years are occupied by subjects that cannot to advantage be shifted to the earlier part of the course. Pupils should reach the high schools thoroly taught in the four fundamental operations, in common and decimal fractions, and in compound numbers. They will, of course, have some familiarity with the more common applications of percentage. In the high school, daily drill should be given in some of the following: Rapid adding, multiplying, billing, and the computation of interest and discounts. Pupils should be taught to write from dictation figures for addition, rapidly, plainly, and in straight columns. Partial payments should be worked by United States and Merchants' rules, and, if time permits, some attention may well be devoted to involution, evolution, and mensuration, in addition to the commoner applications of percentage.

A complete equipment of office books should be provided, as far as possible, so arranged as to avoid duplication of forms, and to illustrate special books, special columns, and special systems. The loose-leaf ledger in one office, the card ledger in another, the horizontal sales and purchase ledgers in another, is an indication of the general plan. Card indexes and ticklers, or "following-up" systems, should have a place. "The vertical system" of caring for correspondence, as well as the common plan of using the letter-book and transfer case, should be represented.

Correspondence emanating from the offices should be dictated to shorthand pupils by pupils acting for the time being as managers, should be transcribed on properly printed letter-heads, copied on a letter-press (or a carbon duplicate filed), and finally sent out in envelopes properly directed, stamped, and sealed, but sealed only after the teacher has inspected and stamped his approval on every business paper contained in the envelope. Pupils should be taught mail classification, and, by using the postal scales, to affix the correct amount of imitation postage. The teacher each day should collect all mail that is to go to the same place, and put it in a large envelope, mailing it to the teacher in charge. A centrally located school bank may be chosen to play the combined part of clearing-house and correspondent bank for the other schools in the association. In short, the offices should be so completely equipped, so systematically laid out, and so enthusiastically and carefully carried on that in attractiveness, in educational worth, and in practical value office practice should be regarded by pupils, teachers, and taxpayers as the crowning feature of a capital course. The initial expense is considerable, varying with the quality. That which I have in mind may run from $700 to $1,500; but this is chiefly an initial expense. The necessary annual outlay is a very small amount, ranging from possibly $25 to $75, according to the size of the school. Probably no other course in the high school assures a better educational dividend than does the properly arranged four-year commercial course, and certainly no other provides the immediate financial income that graduates from the commercial department command.

It is not intended, and it does not appear feasible, that instruction in electives should, for commercial pupils, differ from instruction for the other pupils. The commercial course, not only in a Massachusetts high school, but also in any other high school, should be both disciplinary and cultural, and it should provide such thoro instruction in the technical commercial subjects that graduates from the commercial department of the high school may have not only a general preparation for a business life, but also a definite, technical training that will entitle them, other qualifications being satisfactory, to immediate remunerative employment in a business office.

THE EDUCATION OF THE AMANUENSIS

SELBY A. MORAN, PRINCIPAL OF STENOGRAPHIC INSTITUTE AND TEACHER IN HIGH SCHOOL, ANN ARBOR, MICH.

The kinds of work done by the stenographic amanuensis today are so varied and the quality of the work accepted by employers differs so greatly that it becomes an exceedingly difficult task to treat the subject assigned to me.

In order to lend what little influence I can to raise the standard of professional stenographic work to a higher plane, I have briefly outlined what I believe to be the requirements necessary to the attainment of the greatest success in this line of work.

It seems to me that the most important element, in fact the one thing that really includes all that should be taken into consideration in the education of an amanuensis, is a habit of thoroness. This is something which today, unfortunately, is woefully lacking in the average young man and woman. It is, however, one of the chief essentials to the highest success of the stenographic amanuensis. Thoroness is, of course, important in every field of effort. In no other one is it of so great value as in the one occupied by the reporter. Thru him, as a medium of correspondence, is daily transacted an immense volume of business, amounting in the aggregate to a sum too great for the mind to even dimly comprehend. Today, in the mad race for professional, scientific, and commercial supremacy, the scientist, lawyer, merchant, or manufacturer cannot take the time to minutely scrutinize the important communications he indites, any more than he can spare the time to write out his own business correspondence. Therefore he wants, and must have, as an assistant an amanuensis whose training for this special work has been so thoro that every tendency to error may, as nearly as possible, be eliminated.

This is the kind of stenographer who is today being demanded more and more in the great world of affairs.

An engineer, under the influence of liquor, disobeys orders and wrecks his train. As a result the railroad company which employed him must pay many thousands of dollars as damages. Railroad corporations have learned, after having sustained immense losses resulting from such unfortunate and expensive occurances, that it does not pay to employ men who drink. It is therefore not surprising that the large majority of railroad corporations make it a rule never to employ a man who touches liquor.

Only a short time ago, in Chicago, a manufacturing firm was asked to give a quotation on a large amount of high-priced material. Careful estimates were made by the superintendent and the result dictated to a stenographer. The letter giving the quotation closed with the statement that a 5 per cent. discount from the price quoted would be allowed for cash. The careless stenographer, confusing the discounts allowed on different classes of material, made the clause concerning discounts read 25 instead of 5 per cent. The party receiving the quotation based a bid for an important contract upon the price and discount quoted on the material. As a result he was the lowest bidder. He secured the contract, gave his bond for its satisfactory completion, and wired his order for the material. The Chicago firm then discovered the error, but it was too late to rectify it, and the company was obliged to live up to the quotation made by an incompetent amanuensis. As a result the manufacturer sustained a loss equivalent to the stenographer's salary for ten years.

Errors of more frequent occurrence are those which, as a result of carelessly written letters, give rise to misunderstandings and disputes, and oftentimes to expensive litigation. In view of such things, is it strange that men at the head of large affairs are coming to realize more and more that they must have amanuenses upon whom they can rely implicitly?

The important question arises, how may we educate the amanuensis so that he or she may be so thoro in his or her duties that all danger of these and all other kinds of error may be reduced to a minimum?

In the first place, much depends upon the man with whom you start. Does he want to be something? Can he amount to anything if he has an ambition to make something of himself? Ordinarily, the boy or girl has sufficient foundation of native talent upon which to build. Assuming that he has, the following questions arise:

1. How can you reach and inspire the student with a desire to make something of himself or herself? Without ambition on the part of the student the case is hopeless.

In order to arouse ambition, the teacher must first gain the respect and confidence of his pupil. He can gain and hold the confidence of those whom he would lead up to higher and better things only by cultivating in his own heart a wealth of sympathy for and an interest in the youth whom he would thus inspire. It is oftentimes surprising how even the dullest pupil may in this way be aroused to accomplish what before had seemed utterly beyond his reach. There can be no set rules by which one may attain this end. Each teacher must study the peculiar characteristics of each individual pupil and treat each one according to his special needs.

Following this awakening should come careful, systematic, and thoro training by a teacher capable of developing all that there is in the pupil, especially along the lines most beneficial to the aspiring stenographer. This brings us to what is ordinarily included in the formal school education of the amanuensis.

This formal education must necessarily be of two kinds: First, education in the art of writing shorthand and operating the typewriter; second, general education.

Of the two, the former requires but a few months of careful training and study of a good system of shorthand and the manipulation of the typewriter under the direction of a skilled teacher. The latter, or general education, requires the work of years, and, strange to say, is too often considered of very little importance by those who aspire to become amanuenses.

I have, in this brief paper, confined my remarks to the latter phase of this subject. In speaking of this general education, three things occur to me as being of special importance:

1. One of the indispensable things is a thoro grounding in what may be called the rudiments of English. In my opinion too many schools, even many of the better class of high schools, are sadly neglecting that thoro training in English which should be an important part of every young person's education.

Under this head I would include, first, spelling, capitalization, punctuation, and paragraphing; second, a large amount of careful practice in composition. By this I mean drill in how to express ideas in clear, concise language, using no more words than are really necessary in each instance, and using them in such a way that they will express just what it is desired to express, and nothing more. While these subjects are all studied and practical drill given to a certain extent in every high school, and in most instances in the grades also, the work is not thoroly done. What I mean by being thoroly done is that one shall be so familiar with these subjects that when he attempts to write out matter which he has taken at dictation he will be able to spell readily common words without referring to the dictionary; he will not halt in the use of capitals; will not sprinkle in his marks of punctuation apparently with no conception of their proper use; he will need to make no special effort to properly paragraph the matter he must turn out upon his typewriter. Further, if for any reason the one dictating does not use the best language, or does not express himself in the clearest and most concise manner, the amanuensis should be able readily to recast the matter so as to remedy these defects. I would include among those who need more drill in these elementary subjects not only the boy or girl who drops out of school at the end of the eighth grade, but also the average high-school graduate. I would say, too, that a very considerable portion of the students in our leading colleges and universities could take more drill in those subjects to good advantage. What the amanuensis must have, if he would do his work well, as it should be done, is such familiarity with these rudiments of English that he will, unconsciously and without the least effort or waste of time, properly spell, punctuate, capitalize, paragraph, and (when necessary) edit the matter received at dictation. A stenographer who is able to do this is indeed rare, and when found is always highly prized and liberally paid. What is needed to develop such ability is more drill in these rudiments of English, beginning in the grades and keeping everlastingly at it until one completes his high-school and university course. I am inclined to believe that if, in the high school especially, more time were devoted to such work and less time given to an attempt at advanced literary criticism of our English classics by immature minds, far more benefit would result.

2. Another thing of special importance to the amanuensis is the acquisition of a large vocabulary, and with it a knowledge of the exact meaning and use of every word with which he is at all familiar. This requires long and patient study. To do this it is absolutely necessary that one, as soon as mature enough, shall read and study extensively literature, science, and the arts, and also that he shall keep abreast of current events.

3. Skill in the ready use of words. A knowledge of a large number of words is of but little value to the shorthand amanuensis unless

he is sufficiently familiar with the words he knows to recall them instantly and apply them properly. To acquire an ability to do this requires much drill in the actual use of words. One may be a great reader, and become familiar, in a way, with a vast number of words. This is important and necessary, but not all that is necessary. He must not only have instruments of thought, but he must also know how to use these instruments readily.

It is, it seems to me, right along this line that the large majority of amanuenses are weak. This accomplishment requires extended study and practice. The best college education obtainable is none too much to fit the amanuensis for the attainment of the highest possibilities in his art. Indeed, I would advise that wherever possible the would-be stenographer supplement this with a considerable training in rapid composition. Writing for the press, for example, affords most excellent drill, if done under proper restrictions. Such work will develop a ready and correct use of language, and will be remarkably helpful to the work of the amanuensis. Six months' schooling in this kind of work, under the direction of a critical managing editor who will check the tendency to loose work so common to newspaper writers, will add much to the fluent and correct use of one's English, a thing greatly needed by every would-be amanuensis.

Another thing in which the amanuensis should have careful training is in editing copy. He should be able in an instant to detect errors in construction and in the exact use of words, and should feel it his duty to make amends for the shortcomings of his employer. The lawyer is absorbed in the strictly legal phases of his case; the physician is concerned chiefly with important scientific questions; the merchant is thinking mainly of some business undertaking; the manufacturer has questions of labor, material, and the disposal of his products to demand his best thoughts. Except possibly in the case of an employer engaged in purely literary work, other things than correct English construction are of greatest concern to the employer, and it is the duty of the amanuensis to furnish the literary exactness that is almost sure to be lacking where other questions so greatly overshadow. The amanuensis should in fact be the literary critic of the concern, rather than the literary bungler, as is too often the case.

There is another feature too often overlooked, and one which should always form a part of the necessary training of the amanuensis. I believe it is one fully as important as any. It is the cultivation in the would-be amanuensis of the idea that he should take an active interest in his employer's business. No person has a better opportunity to advance his employer's interests than his stenographer, because his position enables him to know more about it than any other person. In no other position, on the other hand, will it become more readily apparent if the stenographer is indifferent to the interests of his employer. He should understand that this interest cannot be assumed. The relation of employer and amanuensis is too close to allow any pretense in this respect. It should not be necessary for an employer to urge such active interest upon his stenographer. As a rule, an employer will appreciate more thoroly than any other one thing a genuine and a willing interest in his affairs on the part of his stenographer.

I am aware that I have demanded a far more extended education than is usually acquired by the average amanuensis. It is true also that the remuneration usually offered is not sufficient to warrant such thoro preparation on the part of the amanuensis. On the other hand, there is a demand, a constant and an insistent demand, for amanuenses with a liberal education. That this demand is growing, and that the remuneration offered for such assistants is liberal, is known to all who are familiar with existing conditions. Many young men and women with a university education have come to me to be fitted for the work of the amanuensis. I have never known of a single one who has not readily found employment at a liberal salary and in places where the opportunities for promotion were not far greater than are found in the positions usually secured by stenographers who are not university graduates.

I think it is our duty to induce every teacher of shorthand to strive to lift up the profession to a higher level. There is no doubt that such efforts will be fully appreciated by the better class of business and professional men. We need not concern ourselves about the demand for cheaper stenographers. There will always be plenty of second and third class schools to furnish the required supply.

A business or profession is judged by the best men and women it produces. Let us strive, then, to elevate our profession by demanding a better general education on the part of amanuenses. It is sure to give us a better standing and a wider influence.

THE EDUCATION OF A STENOGRAPHER

MRS. M. L. VEENFLIET, PRINCIPAL OF ALPENA BUSINESS COLLEGE, ALPENA, MICH.

As 75 per cent. of stenographers are employed in business offices, the opinion of business men as to what should constitute the equipment of a shorthand secretary or general office amanuensis is of first importance to us in determining the essentials of a stenographer's education. The employing public, not the schools, set the standard of requirement, which is steadily moving upward, and the schools training in this particular branch of practical education fail in their duty if they do not elevate their standard of proficiency in proportion to the advance in the demand. As indicating how high that standard is, I insert a few of the replies I received last month from a number of prominent business and professional men to whom I addressed these questions:

1. Wherein do stenographers most frequently fail to meet the requirements of business offices?

2. Where do you place the responsibility for these defects?

3. Considering a practical course of stenography, what would you advise as to (*a*). content of curriculum? (*b*) speed requisites in both shorthand and typewriting? (*c*) tests? In other words, what proficiency would you require for a certificate or diploma?

The president of a corporation which has made itself felt in trade matters during the past year wrote:

A stenographer should, first of all, be intelligent; quick to catch the language and meaning of the dictator; reliable in spelling and use of good English; able to punctuate and paragraph a letter and arrange it pleasingly without being told. She should at least know the elements of bookkeeping, and be able to make good letter-book copies and to classify and file letters and papers so that she can produce them without delay. The ideal stenographer for any business-man's office must be neat, methodical, and secretive. The stenographer who does not understand that the secrets of the office should never pass beyond the office door is dangerous. Schools should train particularly on this point. Also, a business stenographer should be good in figures and ready in the correction of errors of all kinds.

Who is to blame for the great number of inefficient stenographers? The schools. They don't require enough special as well as general ability. The length of time is too short. It should certainly take as long to make a good stenographer as to make a good dentist, civil engineer, etc.

Another wrote:

A good stenographer is one who can spell and punctuate and who is generally well informed. Shorthand without a good English education back of it simply qualifies some young man or women to be an aggravation, a thorn in the flesh, to busy people. We have just discharged a "steno." who in transcribing a recommendation of our head chemist made the statement, "He is a thinker," read, "He is a thin cur." Can't you teachers weed out such unpromising material? Seems to me this is where your chief duty lies.

A lawyer wrote:

As you know, I lean decidedly to the culture requirements of a stenographer's education. Thoro drill in English, composition, business forms and customs, legal papers, and a general knowledge of English literature and history, and familiarity with the elements of the sciences which are such an important factor in the business of today, are as necessary to the stenographer as ability to take dictation and manipulate a typewriter.

Here is the opinion of a successful teacher of shorthand:

I wish to think of the profession of stenography seriously — as a distinct business venture, rather than a temporary makeshift leading to "something better." A groundwork of English, composition, spelling, and punctuation must be had by every stenographer. In addition to these, for the better class of positions a considerable knowledge of bookkeeping, familiarity with business papers, and a great deal of information of a general nature increase a stenographer's usefulness very greatly.

Another writes :

> The crucial test of knowledge of English is composition. One who can read good literature intelligently and can write English with purity, force, and clearness has sufficient command of the knowledge to meet the needs of anyone except a professional instructor.

In the light of these replies, and from what we hear and read on all sides, we have a pretty good basis from which to figure out the essentials which should enter into the training of a stenographer.

Native ability, the quality known colloquially as "gumption," scholarship—these are the things required to make stenographic service effective. Not the least important of these requisites is gumption, used in the sense of ready perception and discrimination, quick discernment, acuteness, common-sense. The stenographer who has not gumption is a nuisance, and the uneducated one a living evidence of sin on the part of some school.

But what shall we do with the students who lack this sense of the relation of things? Don't try to make stenographers of them, that is all. Advise them to take some other course, or keep them at other work until the quality of gumption is acquired. In this day of liberality in school matters there is seldom any excuse for mistake in the selection of the trade or profession best adapted to any student's particular abilities, acquirements, and the time at his disposal.

No matter what other sins we may have to answer for, let us see to it that turning out poor stenographers isn't one of them. There is no sense in it, no cause for it. Young men and women who haven't gumption enough to get a serviceable knowledge of good English and to broaden out along general educational lines should not be allowed to continue the stenography course in any school. We, as teachers of technical branches, are responsible for the quality of the work we turn out in exact proportion to the power we have of creating the standard of qualification. The proprietary schools are not more free in this respect than the public schools, and the teacher of business subjects who does not feel that his responsibility is always first to the profession he represents fails in that highest attribute of a teacher, that which makes for character in his students.

Business education within the scope of secondary schools naturally divides itself along two lines, bookkeeping and stenography. Necessarily these two courses of study overlap, and there are those who advocate that, especially in the public schools, there shall be only the one commercia course, made up of bookkeeping and correlated branches plus stenography and typewriting; but it is hardly fair to the students who wish to prepare for positions as bookkeepers only to make stenography and typewriting obligatory. Ability to do business and record business are the requisites of a bookkeeper or business manager. The successful bookkeeper need not be able to write shorthand nor operate a typewriter, but the successful business stenographer must know something of bookkeeping and business practice, commercial paper, etc.; hence, it is the stenographic course which, in the secondary schools, should require the longer time and greater preparation.

If there is any one person in a business office who should be well educated, it is the amanuensis. The brains of his employer flow thru his fingers, and the correctness of the rendition depends as much on the stenographer's literary ability as on his skill as a shorthand writer and typist. He must possess the seven cardinal virtues of business: honesty, accuracy, self-reliance, punctuality, industry, neatness, secrecy. The cultivation of these qualities during the training period should keep pace with the growth in perception and knowledge, manual dexterity, and mental nimbleness.

Within the last ten years stenography has developed into a profession almost limitless in its opportunities for advancement for both men and women. Business school employment departments, the typewriter companies, and other agencies of supply cannot begin to meet the demand for competent stenographic help. There need be no feeling of rivalry between the departments of shorthand in the public schools and the private business schools. Both working together will not turn out capable stenographers in greater numbers than business demands. Especially is this true of male stenographers. Last year the employment bureau of one prominent typewriter company placed 16,247 stenographers in seven of the largest cities of the United States. Of this number less than 29 per cent. were men, altho the number of calls for men stenographers thru these seven agencies alone footed up 40 per cent., a fair average of the discrepancy between the demand and the supply for this kind of stenographic help thruout the United States.

The government pays men stenographers $1,200 a year at the beginning, which is increased to $1,400 in six months if the service is satisfactory; but even at these figures Uncle Sam cannot secure all the men stenographers he needs. And the demand is equally great from business and professional offices.

This demand for men stenographers does not indicate any desire on the part of the government or of business or professional offices to supplant women stenographers. Last year's marvelous increase in the number of women stenographers placed in good positions indicates that stenography has opened up to women a source of permanent as well as profitable employment; but there is a class of stenographic work for which men are especially desired, and it will be matter for congratulation if the public schools are more successful than the private schools have so far been in inducing young men to fit themselves for amanuensis work.

By making the course sufficiently thoro on the side of business training, the stenographic course should attract both sexes equally.

I herewith submit a course of stenography which will probably require two years of high-school time, because of the long vacations, short hours, and class plan of work:

Stenography.—Theory of stenography, according to system used. After the textbook part of the work, with daily drill in phonetics, carefully planned dictation exercises leading to accuracy and speed in taking and transcribing business letters, literary, legal, scientific, and historical matter, contracts, specifications, etc.

Time: Thruout the course.

Tests: (1) Ability to take new matter easily at a minimum rate of one hundred words a minute and read back in the same time; (2) ability to write in one hour from 6,500 to 7,500 words of new matter, covering a wide range of business subjects, general information, legal papers, contracts, ordinary correspondence, etc., and to make correct transcriptions of same on the typewriter in not to exceed six hours; (3) ability to take lectures, sermons, testimony, depositions, etc., and transcribe same correctly.

Typewriting.—Expert or piano method (correct position; proper stroke; location of keys not dependent on sight; use of all the fingers; continuous movement of the carriage, the hands writing as the eyes read); word exercises; study of leading machines; plain copying; copying from rough draft; legal and business papers; invoicing and tabulating; making carbon copies; duplicating processes; letter-press work, indexing, and filing; writing from dictation; speed drills; arrangement of subject-matter as to headings, margins, spacing, paragraphs, etc.; adjusting the matter to the size of the paper.

Practice: Daily thruout the course to insure nimble fingers, pliable wrists, quickness and accuracy of sight in following copy, keen development of the sense of location.

Tests: (1) Ability to copy plain manuscript or printed matter at the minimum rate of thirty words a minute for one hour, the transcript to be well arranged, accurate, free from erasures or faulty typing; (2) ability to write accurately from dictation, a half hour at a time, new matter at a minimum rate of forty-five words a minute.

Bookkeeping.—Thoro grounding in the elements of single and double entry bookkeeping; business practice; simple transactions introducing the ordinary record books; business forms; practice in making deposits and keeping bank account.

English language.—Spelling, pronunciation, word study, composition, punctuation, letter writing, grammatical principles, rhetorical principles; diction, synonym, essays, writing, sum and structure of the paragraph, impromptu writing, proof reading.

Literature.—English and American classics, with particular attention to prose style; selected reading, as a basis for speed practice in both stenography and typewriting; selected plays of Shakespeare.

History and biography.—American, English, and general. Biography, history, and literature can well be handled thru dictation, weekly quizzes, and assigned readings.

Arithmetic.—Practical problems covering every subject of business arithmetic; daily drills in rapid calculation; speed practice in fundamental principles, particularly addition; metric system; wages and pay-rolls; foreign money and exchange.

Current events.—Daily discussions, oral and written.

Correspondence (treated as a special subject).—Arrangement and style of letters; exercise in correcting, condensing, expanding. Study of letters relating to special subjects, contracts, sales, credit, collections; social letters and forms; telegrams, circulars, business cards, etc.; paper and envelopes—quality, weight, sizes, etc.

Business forms and customs.—Commercial paper, invoices, vouchers, bills of lading, and manifests, discounts, securities, collections, filing devices, card indexes, etc.

Penmanship.—A plain, rapid business hand. Time, one hour or more a day until proficiency is attained.

Commercial geography.—A general survey of the subject, with emphasis on the commercial, industrial, and economic geography of the United States. Transportation treated specially.

Commercial law.— Fundamental principles governing the ordinary activities of business, paying particular attention to contracts and negotiable paper, principal and agent, common carriers, bailment, partnership, etc.

Civics (general survey of the subject).— Constitution of the United States; principles of government. Dictation of any good text on civil government.

Elementary science (taught principally thru dictation).— Natural history, chemistry, physical geography, geology, physics.

Conversation and impromptu speaking.—One hour a week.

In my school this course had been in operation for a little over three years, and has resulted in stenographers of creditable mental development and intellectual power.

The average time for the completion of the course has been fifteen months. We work on the credit plan, and how long it takes any student to get the number of credits required for graduation depends entirely upon himself, his previous preparation, natural ability, application, and the number of hours he works each day. He may at any time ask for an examination on any subject of the course, and, showing the required proficiency, he is given credit.

In conclusion, I take the liberty of quoting from a paper read by Mr. Charles McGurrin before the National Shorthand Teachers' Association last year:

> Allow me to suggest a thing which has long been a handicap to school men and educators in stenography and typewriting, and which, in my opinion, should be corrected at the earliest possible moment, namely, that of the too short period of tuition prevailing in the schools thruout the country. The fault is due, in my opinion, to the custom inaugurated in the early instruction in these branches. There was a time in the earlier days when shorthand writing was taught in but few schools in the country; when the classes were very small indeed; when it was regarded as an indifferent, unimportant, and unprofitable branch of the college; when the teacher was one who himself had learned for the sole purpose of teaching. Six and eight months within which to perfect a pupil for the work is, I believe, the average period now obtaining in the majority of schools. This time is much too short, and especially in this day now that typewriting has taken its place as a co-ordinate necessity with stenography, and demanding such careful and thoro instruction.

DEPARTMENT OF CHILD STUDY

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 9, 1902

The first session of the Child-Study Department was called to order in the assembly room of the East High School Wednesday afternoon, July 9, by President H. E. Kratz.

The following program was presented :

"New Lines of Attack in Child Study," Frederick E. Bolton, professor of the science and art of education, University of Iowa, Iowa City.

Vocal solo, Mr. J. Austin Williams, "Drink to Me Only with Thine Eyes," *Dressler*.

"The Child-Study Department of the Chicago Public Schools," Miss Angeline Loesch, volunteer assistant, Chicago child-study department, Chicago, Ill.

Vocal solo, Mrs. Maud Ulmer Jones, (*a*) "Daisies—*Hawley;* (*b*) "When Song is Sweet"—*Gertrude Sans Souci*.

"What Our Schools Owe to Child Study," Theo. B. Noss, principal of Southwestern State Normal School, California, Pa.

Discussion by John Dewey, professor of philosophy and education, University of Chicago, Chicago, Ill.

President Kratz appointed the following Committee on Nominations:

E. A. Kirkpatrick, Fitchburg, Mass.
Mrs. Helen L. Grenfell, Denver, Colo.
Harlow S. Gale, Minneapolis, Minn.

The department adjourned.

SECOND SESSION.—FRIDAY, JULY 11

The second session of the Department of Child Study was held on Friday afternoon, July 11, in the East High School assembly room, President Kratz in the chair.

The program was as follows:

Vocal solo, Mr. Crosby Hopps, "Come Into the Garden, Maud"—*Balfe*.

"How Far Does the Modern High School Fit the Nature and Needs of Adolescents ?"— Reuben Post Halleck, principal of Boys High School, Louisville, Ky.

Discussion by E. G. Lancaster, professor of psychology and pedagogy, Colorado College, Colorado Springs, Colo.

General discussion.

The Committee on Nominations reported as follows:

For *President*—G. W. A. Luckey, Lincoln, Neb.
For *Vice-President*— Stuart H. Rowe, New Haven, Conn.
For *Secretary*— Susan F. Chase, Buffalo, N. Y.

The secretary was instructed to cast the ballot of the department nominees as officers for the ensuing year. The ballot was so cast and the officers declared duly elected.

The department then adjourned.

KATE A. HOPPER, *Secretary*.

PAPERS AND DISCUSSIONS

NEW LINES OF ATTACK IN CHILD STUDY

FREDERICK E. BOLTON, PROFESSOR OF THE SCIENCE AND ART OF EDUCATION, THE STATE UNIVERSITY OF IOWA

At the present time child-study enthusiasm of the sort witnessed a few years ago is manifestly on the decline. At the state associations it is difficult to secure an audience, and local societies have diminished in number. The number of so-called investigators and the number of articles on child study have been steadily decreasing. This does not mean that the scientific study of the child is being abandoned. Only the dilettante are dropping by the wayside. The scientist was not lured by delusive hopes. His expectations have been well realized, and large rewards await his future efforts. But the practical effects of child study have been much less important than many have been led to suppose.

That the novices have been disappointed is not strange nor unfortunate. But it is unfortunate that the genuine interest then awakened has not persisted and increased. The reason, however, is not far to seek. Child study has not yielded results that have appealed to the people. Child-study societies have ceased to flourish, and now continue only a devitalized existence because they had little of interest to any save a coterie of specialists. Tho modern child study has accomplished much in a scientific direction, and also in stimulating many teachers and a few parents to take a live, practical interest in children, yet its effects have been very little felt among laymen and uneducated people.

Were we content to gain the ear of the specialist only, there would be no cause for anxiety. But we want the benefits of child study to reach every teacher, every parent, and, still better, every child, in the land. At present the results are inversely proportional to the needs. The very ones who need its help most have been comparatively little benefited. Child study, like medicine, should result in bettering conditions of humanity, else it has no right to exist. This does not gainsay the value of a science of child study any less than a science of medicine. But medicine has only recently become a real science, while it has long been a valuable healing art. May we not hope that many practical results may flow from child study even long before it has become a well-organized science? Hence I believe that students of the child should push their work from a new point of view as well as from the old.

While in full sympathy with all the valuable child-study work that has been done, and also believing that the scientific workers have rich, unexplored fields still to cultivate, I believe that the time is at hand when there ought to be a great awakening of the people to an understanding of the great problem of education, and that is almost synonymous with child study. While we are in the midst of unprecedented wealth and material opportunities, there are grave dangers working insidiously into the very fiber of our national fabric. Someone, with much truth, has said that the American people have been successful in every business except the business of training children. In the mad rush for gold and glory the average father turns his children entirely over to the mother and the schools, and in the recent days of women's clubs and conventions and business activities the women are in turn giving over their sacred charges to the servants and the street. Thus it is that of families with vast estates and wayward children there are everyday illustrations.

When child study is mentioned there loom up in the mind of the average listener images of measuring and weighing apparatus, the isolation of abnormal or exceptional children, tables or statistics, references to remote ancestors, a hunt for vestigial organs, etc. This may represent the field and the point of departure of a certain phase of child study — the genetic or the evolutional phase. Such a study is for the scientist only, however. There is another kind of child study for the home and the school. Tho it may not weigh or measure a single child, tho it may not make a single collection of statistics, it may yet be indirectly of the most valuable sort. This other kind is not only the privilege, but one of the most sacred duties imposed by society upon all citizens. Education is usually thought to concern only teachers, but the methodology of instruction and school government in no way comprehend the whole problem of education. Spencer's comprehensive definition of education as " a preparation for life " is even too restrictive. Education is not begun at the statutory age of five and completed at twenty. *Education is life itself, and life is education.* The education of every individual was begun ages ago. A given life is the resultant of all the forces that have operated upon him and all his ancestors. The modern biological doctrine of memory teaches conclusively that no impression, however insignificant, is lost, either to the individual or to posterity. Thus the sins of the fathers have been visited upon the third and fourth generations, and also mercy has been shown to thousands of generations of them that kept the Lord's commandments.

Therefore the obligation resting upon each individual for the account of the deeds done in the body is faithfully recorded away down in the nerve cells and fibers, and at any moment the book of life indicates the exact balance. Even without lineal descendants, the influence of our lives is never obliterated. There are two great factors in everyone's education — heredity and environment. Heredity is the conservative tendency. Environment makes for variations. Now, every individual, unless he be absolutely isolated even more than Robinson Crusoe, is a part of somebody's environment. Every action has a direct influence upon our own future and that of our posterity, and indirectly there is an influence upon others. Like the pail of water which has been made slightly different by the added drop, never to return again to its former state, so society as a whole is different because of each act of every individual composing it.

Thus is each one to some degree responsible for the character of those with whom he comes in contact. Thus is each one his brother's keeper. And if responsible for the character of future civilization, should not all have the deepest concern for the education of children? Should we place their education in the hands of incompetent, untrained teachers? Shall we permit children to go to school under any except the very best conditions known to the science of education? Shall we permit children to attend school in overcrowded schoolrooms, where they learn habits of inattention and dawdling? Shall we permit the school playgrounds to be unsupervised and our children continue to become inoculated with the immoral filth which pollutes many a school playground? When we understand the far-reaching effects of the present upon the future, the influence that others exert over us, the influence other children exert upon our children, then we shall be more careful to secure only pure, wholesome, elevating, stimulating surroundings for ourselves and our children. We shall be almost as deeply concerned to educate our neighbor's children properly as we shall be about our own, for in the widest sense we cannot educate a given individual properly without suitable environment. Every man is a product of the time in which he lives. The great man of a time merely epitomizes the greatest and the best of his civilization. A great statesman cannot be produced without a great state. A great scholar cannot live in an unscholarly time or place. Therefore, every parent who wishes to educate his children in intellectuality, morality, and virtue must seek to secure those conditions in his neighborhood, his school district, his town, his county, his state, his nation, yea thruout the world. No one who desires to educate his children properly moves to the slums; no, he moves where culture is highest, not because good teachers may not be secured for the slum districts, but because of all the other contributory factors. While many seek these conditions, few understand their duty in creating such an environment.

The child study of the immediate future must be so conducted as to bring more immediate benefits to children. It must be of such a nature as will appeal to the people. Down to the present it has brought even opposition from them. Their children have been experimented upon, tabulated, and weighed, and measured, and classified, but the only thing of all this that has come to the ears of the people is that certain children are peculiar or abnormal. Hence as soon as child study is now mentioned they begin to imagine that you are hunting curios or abnormal specimens. We must bring the people into sympathy with us, and not court their disgust and disapproval. We must begin to bring them benefits. What they want is medicine, and not diagnosis alone.

How shall we correct the cigarette habit, the nickel-library habit, utilize the gangs in righteous club work, cause the parents to secure medical treatment for suffering children, induce proper hours of sleep and recreation, prevent nervous breakdowns, remove temptations, provide wholesome occupations and amusements, etc.? Questions like these are of far more vital importance than mere diagnosis and cataloging of conditions. What we seek are remedies.

There are numberless questions waiting solution which are worthy any scholar's attention. They should be undertaken primarily in the hope of helping children and humanity in general. They may develop articles and theses, but this should not be a motive for their undertaking. Much of the work suggested can be accomplished only indirectly. All teachers must first be indoctrinated with child study and with education in all its broader aspects. Further, education should be a study not alone for teachers. If any classes of persons need child study more than teachers they are the parents and school boards. May the day be hastened when the study of the principles of education shall become a regular part of the course pursued by every college student! Among the list of required subjects I would place education, rather than algebra, Latin, and Greek. Not only should education be included in the required studies in the colleges of letters and science, but also in the colleges of law and of medicine, etc. Even in the high school an elementary consideration of the relation of education to society might be undertaken, and be more beneficial than a knowledge of Cæsar's wars.

Just at this time we need to secure the co-operation of the public press in the interest of better education. While the newspapers now give pages to prize-fights and horse racing, they give only paragraphs to public education and child-study congresses. The newspapers have almost unlimited power in creating public opinion, as is attested in every election campaign. If they could be enlisted in spreading the gospel of child saving and child culture, the results would be unpredictable.

A Carnegie who would endow in every large city a newspaper which would give the news, not scoops and reporters' exaltations of imagination; a paper which would avoid sensationalism, eliminate and reduce the recital of crime; a paper which would rigorously exclude advertising matter which rivals the *Police Gazette* columns, all advertisements of quackery, charlatanism, and traps for the unwary—a person who would do this would be a benefactor of the boys and girls of our country. Many a youth has been sent on the downward road to ruin by reading the advertisement of quack doctors in our newspapers.

The newspaper is said to be a reflector of public opinion, but it is more truly a former of public opinion. Suggestion is a mighty force in all our life. Ideas which are constantly heralded before us eventually find lodgment in the mind. Once intrenched, according to the law of ideo-motor action, they are most sure to find some expression in activity. Could the newspaper publisher understand the mighty power of suggestion, and could he take a square look at the morality of accepting an advertisement, he would no more think of inviting the unsuspecting thru his paper to be swindled or dosed and poisoned physically and mentally than he would think of standing on the street and distributing handbills or giving the same to his friend's son. Here is a chance for a study. Who will find a way to enlist the public press for education? Along with this we need to make a crusade against the omnipresent, hideous, demoralizing posters that stare at us on every hand. Their influence counteracts all the æsthetic cultivation that is afforded by art instruction in schools. Before holding out health-giving tonics let us remove the contaminating influences that beset us on every side.

The playground as an educational factor has not yielded the best results possible. We need many more experiments like those of Superintendent Johnson at Andover to determine how to utilize this factor in modern education. How to select games that shall interest, instruct, and develop, and at the same time how to keep all at play, is a difficult question. Mr. Johnson has rendered inestimable service by his suggestions gained thru actual experience.

We are constantly admonished that the period of adolescence is a time for great concern, and that our present methods and procedure in school are entirely at variance with adolescent needs. But who has given us a workable plan which can be reasonably offered as a substitute? The high school is confessedly without sufficient attractiveness to boys, and is very largely feminine. Many theories have been put forth diagnosing the situation, but how few persons have come forward with accounts of curative measures successfully applied! These are the persons we need to hear from in the child-study meetings.

In the Sunday schools it is rare to find a boy of adolescent years. Theories without number have been put forth to explain their absence, but how few are the recitals of successful means of securing their presence and assistance! If the church and Sunday school do not meet the needs of the boy, then what substitute can be provided?

Dr. Byron Forbush has given us the most valuable piece of child-study literature that has appeared in many a day. It is especially valuable because it indicates just how he has actually accomplished so much in establishing boys' societies and clubs as a substitute for the gang and marauding band. The article, however, is in no way comparable in value to the work which it represents for these boys. It is the *work* with boys and girls primarily, and not articles and reports, that we need.

We know well that the child's strongest characteristic is activity, and yet how little do we utilize his activities in teaching! We are remiss in this principally because we do not know just what activities to utilize, nor do we know what sort of occupations will utilize the activities he possesses. From impression to expression is a slogan which we have heard so frequently of late that it rolls off our tongues like many religious sayings which have no significance. The idea is correct, but who has made a study to show the varying application? Knowledge of ethical principles is only slightly valuable until it has given rise to activities in harmony with them. The boy who learns to denounce rascality in historical characters, and then goes out to the playground and cheats, lies, and terrorizes those weaker than himself, might almost as well have left the literature unstudied. According to James' theory, the lessons are worse than wasted. In all ethical training we need to enlist the services of the youth in definite active moral enterprises. To weave ethical teachings into the fiber of their lives we need to secure their co-operative activity in assisting the needy, relieving suffering, protecting the weak, preventing cruelty to animals, ministering unto the sick, bringing sunshine to minds clouded by sorrow and distress. We need to emphasize more the gospel of service. The gospel of feeling has received its due share of attention. With proper service, feelings will take care of themselves. Children should be taught that no man liveth unto himself, and that genuine service rendered unto others is the highest morality.

Advanced thinkers clearly see that educational practice has too long maintained the scholastic divorcement of home and life interests from school duties. Our attitude has been a vestige of the period of world renunciation. But we are beginning to believe that education is life and all life is education. Now, how to identify these interests and occupations so as to secure an ideal education and an ideal life is the problem to which few have really addressed themselves in the interests of the child. We need many more investigations like those of Dr. Dewey.

Another problem demanding our attention is that of juvenile offenders.

Every city and town has its cases, all too numerous, to deal with. Lucy Page Gaston is authority for the statement that 17,000 child criminals are arrested yearly in Chicago. It is gratifying that noble men and women are studying this problem and attempting to secure juvenile courts and corrective institutions whereby these children, largely the victims of vicious environments, may be shielded from further vice and helped toward reform. But far too little has been attempted in the way of prevention. Moral typhus pervades the atmosphere of thousands of luckless urchins, who, unless the disease is stamped out, or they are rescued from its contamination, will become infected just as certainly as tho living in the pesthouse amidst smallpox. Our legal philosophy is inconsistent when it assumes the right of the state to isolate and punish criminals and does not assume the right of the state to withdraw the child from the cause of such crime, or require the home and community to furnish surroundings conducive to right living. Instead of punishing the child as a criminal, every parent whose children under sixteen years of age are brought into the police court should be punished. The parents are the culpable ones. Neglect and indifference of parents is the antecedent of most childish delinquencies. Dr. Wm. T. Harris says: "If I were to name one product of vice or crime that would nearest touch the heart of all good people, I would say the neglected child. Give me the child, and the state may have the man. Every case of vagabondage has its root in some neglected child."

In this work we must secure the co-operation of the clergy. Ministers should be trained in child study, and should devote a considerable part of their time to child-culture questions. It is pathetic that the churches have done so little for the child and have spent their time and energies in trying to convert confirmed sinners, a task psychologically almost impossible. The new note in education and religion must be prevention, rather than cure; formation of character, not reformation; righteous growth, not redemption; positive development, not repression. More effective training of children would lessen the number of adult sinners. Jesus said, "Suffer little children to come unto me and forbid them not, for of such is the kingdom of heaven." Children must be trained to walk in paths of rectitude, and not, when adults, converted from their evil ways.

We must also secure the co-operation of physicians and lawyers. They have much expert knowledge that may be utilized in the service of the child. From personal conferences with many physicians, I know that they are very sympathetic with many child-study problems, not alone questions of physical welfare, but intellectual and moral problems as well. The lawyer can render expert testimony and helpful suggestions concerning child-labor laws, juvenile courts, corrective institutions, dependent and abandoned children, etc.

Finally, we must secure the co-operation of business-men and the home-makers. When a question comes to the point of legislation and execution, teachers and scientists play a very unimportant rôle. The lawyer and the capitalist make laws, and the lawyer interprets them. The schoolmaster teaches obedience to them. Last winter, when certain educational laws were before the Iowa legislature, it was said that the teamsters' union was more effective than the State Teachers' Association. The teacher's voice is one crying in the wilderness. He is a prophet, not a lawyer. The teacher may say what he will about cigarette smoking, but his words of wisdom go unheeded. Whenever the railway managers find that the cigarette fiend is an inefficient operative they can immediately secure reformation among their employes.

Because of these conditions there must be a joining of forces. I am not sure that there should be any local child-study societies as such. If the child-study specialists and the teachers could ally themselves with the mothers' clubs, the civic leagues, good-government clubs, etc., and there consider child-training questions as one among others, would not the net results to the child be greater? If our National Educational Association could bring into its ranks the lawyer, the doctor, the editor, and the business-man, if we were not so dissociated from everyday life interests, instead of being identified with them, we could much more easily reach the public ear and arouse public sentiment.

In conclusion, I desire to suggest some of the most pressing problems for child study. Better child-labor laws, the establishment of juvenile courts, segregation of juvenile offenders from confirmed criminals, compulsory education laws in every state, the execution of such laws, fewer children per teacher, better utilization and supervision of playground education, an educational journal that appeals to the home and the school, the establishment of the kindergarten in every hamlet and city in the United States, the co-operation of the clergy, the lawyer, the doctor, the business-man, and the home.

The child study of the future should deal not less with anthropology, but more with pedagogy; not less with intellectual training, but more with moral; not less with a study of origins, but more with shaping of destiny; be not less curative, but more preventive; not less psychological, but more sociological. May the scientific interest of the specialist be not one whit abated! But he should seek to couple with this more of practical usefulness than he has in the past. The interest of the teacher should not be in the theoretical consideration of the science, but in the practical application that may come from well-formulated principles. The schoolroom is not the place for experimentation upon children, and the teacher should not be an experimenter. It is well if the teacher has had scientific training; but the sooner teachers and parents learn that child study in the home and in the school is primarily for the good of the child, secondarily for the good of the teacher or parent, and only incidentally for the sake of the science, the better it will be for the child and for the reputation of the science.

THE CHILD-STUDY DEPARTMENT OF THE CHICAGO PUBLIC SCHOOLS

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With the advice and co-operation of Dr. W. S. Christopher, the Chicago board of education organized the department of child study in July, 1899. The three members of the department, Mr. F. W. Smedley director, Mr. C. C. Krauskopf and Dr. D. P. MacMillan, assistants, have therefore just completed their third year of work.

The first period, sixteen months of that time, was devoted entirely to certain investigations into the physical condition of the Chicago school children. There were taken and recorded for each child measurements of his height, standing and sitting, weight, strength of grip, lung capacity, and tests of hearing, sight, and endurance. Records of place and date of birth and nationality of parents were kept, as well as careful notes on any marked defects of growth or development. For tests of grip, an adjustable dynamometer invented by Mr. Smedley was used, and the ordinary wet spirometer for lung capacity. Sight and hearing were tested, the former by Snellen's test typecard, and the latter with Seashore's audiometer. Mosso's ergograph, somewhat modified by Mr. Smedley, was used as a test of endurance and an indication of general nerve strength. Its results were recorded in kilogram centimeters; time given, ninety seconds. In all, 6,259 school children were examined, 2,788 boys and 3,471 girls. These included all the pupils of four large elementary and two high schools, besides eighth grade and kindergarten in others.

After compilation of data, the fruits of this work were many tables of average height, weight, etc., for boys and girls of all ages; and these were designed to be used as a basis of reference for much of the department's later work. To obtain these norms had been the whole object of the sixteen months' work. Whatever individual advice as to incipient nervous disease, defects of hearing or sight, was given to pupil or teacher was merely incidental. The gaining of norms, the establishment of a physical basis for comparing children of one age with those older or younger, the boys with the girls, the dull children with the bright — this was the purpose to which all else was secondary.

Specifically, the results may be put in the form of one concrete example. According to the department's statistics, a Chicago school boy ten years old, if of ordinary physical and mental development, could be described, in average numbers, as follows:

BOY OF TEN YEARS

Height, standing	4 feet, 3½ inches
Height, sitting	2 feet, 4 inches
Weight	63 pounds
Amount of work possible in 90 seconds	16 ft. pounds
Strength of grip, right hand	36 pounds
Strength of grip, left hand	34 pounds
Lung capacity	97 cubic inches

He is able with either eye alone to read type three-eighths of an inch square at a distance of twenty feet. In all these respects the boy of ten years is just ahead of the girl of the same age. She is one-half inch shorter, two pounds lighter, grips four pounds less, and is eleven cubic inches less in lung capacity. Needless to remark, her eyes and ears are just as good as his. When this boy is fourteen years old he is five feet tall, a gain of eight and one-half inches (the major part of it, by the way, in length of limb); he weighs ninety-four pounds, has a lung capacity of 146 cubic inches; his strength of grip, right hand, is sixty-two pounds.

BOY OF FOURTEEN YEARS

Height, standing	5 feet
Height, sitting	2 feet, 7 inches
Weight	94 pounds
Amount of work in 90 seconds	28 ft. pounds
Strength of grip, right hand	62½ pounds
Strength of grip, left hand	58 pounds
Lung capacity	146 cubic inches

While the girl of ten was in all respects the physical inferior of the boy of ten, when they are both fourteen we find the case somewhat altered. The girl is now one-half inch taller than the boy, and three and one-half pounds heavier. But in other respects he still surpasses her. In a word, he has kept his superiority in strength but lost it in size, a loss only temporary, of course.

GIRL OF FOURTEEN YEARS

Height, standing	5 feet, ½ inch
Height, sitting	2 feet, 8 inches
Weight	97½ pounds
Amount of work in 90 seconds	23 ft. pounds
Strength of grip, right hand	54½ pounds
Strength of grip, left hand	50½ pounds
Lung capacity	123 cubic inches

The possession of material for such comparison *ad libitum* was the result of the child-study department's first year and a half of work, a labor more satisfactory, perhaps, than that of the next year, because the more definite; but more statistical, and so less interesting.

The latter half of the work, extending approximately over fourteen months' time, may be looked upon as of two sorts:

1. The application to various school problems of the norms gained.

2. The approaching of the more difficult and delicate task of gaining a few psychological norms; these to be employed afterward along with the physical.

Of the former, i.e., the use of the physical norms, we shall presently speak more fully; of the latter, the psycho-physical work, only a little can be said. It is both unscientific and uninteresting to dwell on a half-finished task. Suffice it to say that the children's power of constructive imagination, of immediate visual and immediate auditory memory have been subjects of experimentation. Criticism and discussion of method were here of course very important. After repeated trials and changes, a method was decided on as adapted to the conditions. So far, only one or two indications of results are worth mentioning:

1. Data obtained show no sex difference in memory power; no evidence, as other experimenters have found, that the girl's memory is more accurate than the boy's.

2. Nothing points to the existence of a "memory period," i. e., a time when the child's memory power is actually stronger than at any later age. Whether at one period the memory is the predominant mind-process is another question. Growth of memory power is rapid up to thirteen or fourteen, and slow, tho steady, afterward thru the school age, i.e., to twenty-one.

3. Visual memory is weaker than auditory in very early school life, is equal to it at nine years, and by fourteen is almost invariably stronger. Is this the natural course of development among people who are neither exclusively "eye nor ear minded," or is it the effect of school life?

4. Among the pupils, more of the visualizers are above grade than those who depend on the auditory memory. Is this because in modern life the eye is the more useful sense-organ, or because school work is so largely planned for visualizers? The facts which raise these questions are still unsupported by sufficient quantities of data to warrant their discussion.

Another psycho-physical test which promises to be most profitable in its outcome is that for quickness of movement, muscular control; this involving, of course, powers of attention. With a metallic pencil the child taps as fast as possible on a platinum plate one-half inch square. Time allowed is thirty seconds, and the number of taps is automatically recorded. The records of about twelve hundred pupils—too few for conclusions—show the boys slightly quicker than the girls, and in both sexes, from eight to eighteen years, a steady gain with age.

For undertaking such tests as these, immediate and local pedagogical problems have in each case supplied the motive. And, because it means economy of pupils' and experimenters' time, several problems are often attacked at once, as they have been this year, when, for example, methods of teaching spelling and the effect of manual training in the elementary school were both under discussion. It is to be remembered that the department was not organized for psychological research, but to use the means furnished by the psycho-physical laboratories as an aid in the solution of Chicago's school problems.

To return now to the other part of this year's work, work which logically follows and depends upon that of the years 1900 and 1901, i. e., the using of the physical norms in certain specific problems.

Any teacher knows that present conditions in most of the schools compel many children to use desks much too large or too small for them. Adjustable desks are a comparatively recent innovation and are expensive.

The result in our schools has been a guesswork combination of large and medium-size or small and medium-size non-adjustable desks. The child-study department was asked for a recommendation in this matter. By referring to average-height charts it responded with a report giving the proportion of adjustable desks necessary for each school grade, and also the best size for regular desks. These instructions are now followed in each new school when built.

The norms have also been used for reference in examining special groups of individuals in the public-school system. Two years ago, for the first time, the high-school graduates, before being allowed to enter the normal school, were required to pass a physical examination. This examination was conducted in part by physicians appointed by the board of education and in part by the child-study department. Measurements of height, weight, strength, and lung capacity were taken. Also sight and hearing were carefully tested, and if found seriously and irremediably defective the applicant was refused admission to the normal school. The same examination is regularly given at the close of the normal course, and must be satisfactorily passed before the young woman is allowed to teach. Physicians and the child-study department look wholly to the welfare of the children in this matter, and no young woman whose physical health is such as necessarily to impair her usefulness as a teacher is recommended.

Another group examined yearly is the boys of the John Worthy School. This is a public school maintained in connection with the Bridewell, Chicago's prison for criminal and delinquent boys. Physically and mentally these boys are found to be much inferior to the ordinary schoolboys of the same age. In height and weight the averages of the John Worthy boys were, for the ages from eleven to seventeen years, from 1 to 23 per cent. lower than the norms for those ages. In strength of grip, endurance, and lung capacity the averages were even lower. Strength of grip, for example, of the sixteen-year-old John Worthy boy was 46 per cent. less than for the ordinary sixteen-year-old high-school boy. Resulting from these examinations there were sent in to the board of education certain recommendations as to the treatment of the pupils in the new parental school, which will have many of these same boys to deal with. Mal-nutrition was a very common condition, and was looked on as a cause of some of the defects. It was therefore advised that particular care be given to provide nourishing food and much manual training. In the future a physician will reside at the parental school who shall be a member of the child-study department, and shall aid the examiners in their oversight of the boys' physical condition.

But by far the most important work made possible by possession of the norms has been that done in the child-study laboratory. This laboratory was established in June, 1900. Some special apparatus and a room in the board of education quarters was open each Saturday of the school year. To it parents and teachers were invited to bring any children who, they thought, needed a careful psycho-physical examination.

The child who comes to the laboratory is examined in the following way: Physically and psycho-physically he is measured, and the results compared with the data for the normal child of his age. General facts as to his home and school environment, his conduct, previous illnesses, etc., are obtained. This is done by questioning and consulting at some length with his parents and teachers, for usually at least one of the parents and either the child's teacher or principal are present. Lastly, the child is closely observed thruout the time he is in the room, and careful record kept of any growth and developmental defects or abnormalities. To the teacher and parent conditions are then explained, and, as far as may be, advice is given about future treatment of the child in school and home. In all, 360 children have been examined—276 boys and 84 girls—the great majority (231) of these from seven to eleven years old. Most of these might be put into one of five groups:

1. Dull, but physically well.
2. Dull and physically defective.
3. Bright and very well developed physically. (These brought in with the false idea that they are overdeveloped and should be held back mentally.)
4. Bright mentally, but weak physically.
5. Very defective in sight or hearing.

Thru the laboratory the child-study department acts in a way as a general adjusting bureau for the schools. It is called upon to answer such questions as these:

> For this child with very defective sight, is the best place the ordinary class-room or the department for the blind?
>
> This child does well enough except in drawing, or in singing, or in arithmetic, and there he absolutely fails. Have you any suggestions to make?
>
> Is there any explanation and remedy for this boy's fearful restlessness, making him extremely hard to manage in the schoolroom?
>
> Is this backward, inert child mentally defective, physically incapable, or merely indolent?
>
> Are these ten or twenty pupils backward enough mentally to warrant their segregation in a special room?

All these queries the department answers as best it may. If it recommends a special room, it afterwards keeps watch of the pupils, and often finds improvement enough in a few months to sanction the return of the child to the graded room.

This question of "segregation" reminds us of the true reason for the existence of a laboratory, a motive which it has in common with all state segregating institutions, a motive of which it never loses sight—the good of the large majority, the normal individuals. With their interests chiefly in view, all reasonable aid is sought for the abnormal, and his segregation if feasible. That it makes for the normal children's welfare to assist or remove the seriously defective no teacher will deny. That the interests of the two classes generally coincide is an indubitable fact most welcome to all concerned. After calling attention to the underlying purpose of this laboratory, and to the fact that 360 children have been there examined and in a great many cases helped, it is needless to reiterate the importance of this part of the work.

In a word, then, the aim of the child-study department has been:

1. A collection of data, physical and psycho-physical, to help in solving pedagogical problems.

2. The use of those data and all other aid possible in the public-school management of backward and delinquent children.

3. (And this work is only just begun.) The presentation to the teacher of the facts and conclusions to assist in his valuation of the child and his adaptation of the curriculum.

WHAT OUR SCHOOLS OWE TO CHILD STUDY

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In the study of the child, as in the study of nature, much has been left to the last two decades to discover. We speak of the present as an extraordinary era of invention and discovery. It may be that the greatest discovery of all is that of the child. People will say, "We have had child study for twenty years. What has it done for our schools?" The answer is: It has done much to give us a new education. More particularly child study has contributed much to give elementary schools (1) an improved curriculum; (2) a better method; and, most of all, (3) a new goal.

The curriculum.—The employments of an up-to-date primary school bear slight resemblance to those of a primary school of thirty or forty years ago. The child then had little to do and much to remember. Even yet it is painful to see that in thousands of elementary schools the traditions of the past enthrall the teacher. The children in less-favored localities still devote their time, not to doing what is interesting and useful, but to memorizing what is for the most part dull and useless. The secret of the best primary work of today is that it is essentially doing something, instead of committing something to memory. It has been truly said that "the strongest potential capacity in the child is capacity for action."

In the kindergarten, where the blight of custom is less felt, and where there is a constant appeal to what is natural and interesting, the principle of freedom and self-activity dominates. So in the university and the technical schools (which in some measure have caught the spirit of the kindergarten), where there is a constant demand for what is useful and vital, again the method of freedom and self-activity dominates. It is only between these happy extremes that the practices of the school still show in many places the stupid memory habit and the text-book disease of a past generation. And now, fortunately, we see that many of these schools are moving toward the light. Are we not indebted in a large measure to child study for this new view of education which adapts subject-matter and school employments to the real needs and interests of the pupil?

It is a matter of regret that more progress has not been made, that in so many schools there is still an adherence to old forms from which the soul of truth has departed. Lesson matter was formerly chosen because of the utilities of life; hence the prevailing notion of the paramount value of the three R's. Now we have no patience with such puerilities in education. The utility of the child himself as a personality to be developed is of such towering importance that nothing else is worthy to be compared with it.

Child study has given new emphasis to the old doctrine that the essential element in education is not knowledge, but training. Nothing can be truer in practical pedagogy than Solomon's dictum: "Train up a child in the way he should go, and when he is old he will not depart from it." Education consists chiefly in forming rather than informing the mind; the creating of interests, the formation of habits, rather than the storing of memory with conventional knowledge.

All great success in early training springs from intelligent and sympathetic interest in the child himself. Child study has come when most needed to direct the attention and interest of teachers to the paramount importance of the child himself in the process of education, and to emphasize the importance of beginnings. What is put into the first of life is put into the whole of it. The earliest efforts yield the best and the most fruit. To concentrate upon the early years is to seize the strategic point. Lose this and we lose the battle. The failure and waste of life in thousands of men and women thru neglect of early training is the saddest tragedy of modern life.

The method.— In education most depends, not upon what we study, but how, and with whom. The method of the teacher is always important. Here is the pearl of great price in the art of teaching. How is a method of teaching learned? By a study of the subject-matter alone? No, but by a patient, loving study of the child.

Child study has taught us the value of motive in education. President Eliot recently said: "When you appeal to a child with motives he won't use when he is a man, you have not helped him much. "Motive," he adds, " makes all the difference between slavery and freedom, between misery and happiness." We sometimes hear the fear expressed that the new methods make education too easy. It is true that for the best results oft-repeated and severe exertion is necessary, but it is never necessary that this exertion be made without motive. Hard work is necessary, but should it ever be done without interest and a pleasurable sense of reward? "The time of interest is the time of opportunity." There can be no excuse for making things dull or difficult that may be made easy and attractive. The child must be dealt with sincerely, naturally. We do not expect success by finding the longest way instead of the shortest, the slowest instead of the quickest, the hardest instead of the easiest. The common-sense of the busy and prosperous life of the farm, the store, and the street is just what is needed in the schoolroom. Good teachers will soon cease to believe that some studies are good for discipline that are not good for anything else. The best discipline is and must be found in doing something worth doing, and doing it well. Life is a unity and is continuous from the cradle to the grave. The school is not to be viewed merely as a preparation for life, but as a very important part of it. Those interests should be begun, those methods started, those purposes planted that are to characterize the life thruout.

If this be true, how important it is that we scrutinize very carefully the usages, employments, and methods of the school, lest haply we find that we have wasted time and dissipated energy and acted very foolishly in dealing with children!

The end or goal.— It is now more evident than ever before that the true aim of education is not knowledge merely, or chiefly, but a many-sided development. Child study has helped us most by enhancing our value of the product of our work. This is nothing less than skill of hand and eye and tongue, a well-poised body, a well-rounded mind, a sympathetic and altruistic nature, strong and worthy interests, force of will, and power to do.

Knowledge is not the end. Tho the pupil have all knowledge, and have not interest and motive, it profits him nothing. To what, then, shall we appeal in education? To the needs of the individual child. There is but one rule that will never fail us, and that is, study and serve each child. Everything else must be secondary to this. School is but a contrivance to help the child. The rigidity of the curriculum and the school routine must yield somehow to the needs of the individual child, or it would in many cases be better to take the child out of school. By far the richest fruit of the whole child-study movement is the greatly increased interest in the child to be educated.

The Great Teacher said, "Consider the lilies of the field how they grow." In education we have at last happily reached the stage when many teachers really "consider" the child.

Child study seems destined, not to modify merely, but to revolutionize, our methods of discipline. The teacher who punishes the child in ignorance of physical infirmities and home deficiencies is inexcusable, and the teacher who does so with a knowledge of, but without allowance for, these things, is cruel and brutal. No hand is fit to touch young life in the schoolroom except the hand of skill and kindness. Almost as well employ an eighteen-year-old girl without special training to fill prescriptions in a drug store as to employ her without training or preparation to teach children. The demand should be instant, constant, persistent that only well-trained teachers shall be put in charge of schools. Child-study has emphasized this demand as no other educational movement has done or could do.

In spite of all that child study has accomplished, a recent writer says: "There are some healthful signs that the child-study diversion which has been carried to such extremes has well-nigh run its course." In my judgment the most hopeful sign for the future of elementary education is that child study has only begun its course.

DISCUSSION

JOHN DEWEY, professor of philosophy and education, University of Chicago.—I would emphasise, first, the last statement in Professor Noss' paper. The chief thing child study has done is that it has regenerated the peculiar thing named "pedagogy and psychology for teachers," a great deal that formerly went by this name being very remote. The first pedagogical doctrine, "from the concrete to the abstract," was often disregarded by pedagogs themselves. The concrete for the teacher is the mind of the child, not mind in general, but a particular mind, a particular spirit in an individual child. Child study has led us to base methods on the actual characteristics of the actual concrete being under instruction. Classifications used to be laid down of the various faculties of the mind: memory, imagination, reasoning, and rules given for training each. There was smooth sailing when these were considered only theoretically; but when the rules were applied to children it was discovered that the latter were not faculties, but live beings. A person from Mars might study purely theoretical pedagogy, and still not be able to identify a human being. Analysis is carried so far that it would not put one in touch with faculties when bound together in a human being. Independent of some exaggeration about particular truths discovered by child study, it has served to put emphasis in training a child upon the right basis. The teacher who really knows the subject to be taught and the nature of the individual mind which is dealt with can develop his own devices with better results than he could attain by learning particular recipes having not much to do with the child. Child study has put into proper perspective the sort of training which the teacher needs, and has brought a vitalizing element into the work. We teachers are the most conscientious class in the world; often too conscientious in following types of pedagogical recommendations which bring no adequate return. Child study vitalizes the truths grasped after.

Child study has brought about a different conception of education itself. One of the late advances in education was the doctrine of drawing out instead of pouring in. But the thing drawn out was expected to be knowledge, as tho the child had swallowed the world, and methods must be applied to draw out of him what he has swallowed. Conceive little children in the home or at play. They don't sit around waiting to have things drawn out, but are all activity, full of intensity, zeal, restlessness. Child study makes prominent the activities of the child and tries to find the line along which these activities can direct themselves.

Child study brings out the significance of development in education. We have always talked about this, comparing the child to the acorn, but it has been treated in a poetical rather than a scientific way. We recognize particular characteristics which are prominent at different periods of growth, and which must be treated in different ways. Child study has done much in bringing out the defining and leading characteristics of different epochs. Biologists talk about a culture medium. According to different media they get different results in lower and even in higher forms of life; and this control of the nature of living things is as scientific as the action of machinery. The skill of the horticulturist in transforming grains and fruits is not guess-work or haphazard, for he knows the conditions necessary for such transformation. There is certainty that this can ultimately be done in human development when conditions for growth are better known. To say that there are laws governing the movement of planets, laws of chemistry, metals, etc., and that mind has no laws of its own to be made use of, is absurd.

To ridicule child study, which has its excresences, is to say that mind has no laws which can be discovered. The time will come when one of the two or three important facts which educational history will mention about this period will be its recognition that the embodied mind of boys and girls has laws which can be discovered, and the laws discovered give a basis for directing a growth which will give the richest and best results.

THE PHYSIOLOGY OF CHILDHOOD AS APPLIED TO EDUCATION

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The literature of education is rich in its elaboration of the methods of instruction and in its discussion of the tools of teaching. It is poor still, and that despite some recent valuable contributions to its treasury of knowledge in the study of the human being to be taught. As in the library, so in the schools. The teacher is trained in the technique of his task, in the use of his implements, in the subject-matter of the multiplicity of themes he is to teach. He learns little of the physiology of the child with whose physiologic development he is charged.

The true musician is he who knows not only the science of harmony, the theory of composition, the technique by which his musical conception is to find expression in instrumental or vocal form, but he who is familiar with the structure of the instrument by which his creations are to be actualized. It is a master hand guided by a master mind which touches to our finest sense the keys which utter his musical message to mankind. But it is too often an unskilled hand which fumbles with roughly shapen fingers, an unawakened eye which scans the unmeaning measures, an unknowing mind which seeks to stir the sweetness of this harp of a thousand strings, to awaken the harmonies of the human mind in which the music of a myriad years is massed.

Child study, it is true, is a recognized obligation of the teacher of today, but child study has been pursued almost exclusively from the metaphysical viewpoint, and has, so far, been based but little upon the physiology of the young human body, of which the mental is the highest, but not the only, nor in any sense an independent, form of functional activity. The subject has been obscured by the pursuance of technical details of mental peculiarity, instead of being illumined by the liberal study of the broad principles upon which the physiology of childhood rests. The consequence is that modern education is, in its results, a departure from the ancient ideals which we, far better than the ancients, with far greater possibilities of knowledge than they possessed, have the opportunity to attain—the culture of a *mens sana in corpore sano.* The consequence, to put it in positive terms, is too frequently seen by the physician in an unfortunate tendency to the asymmetrical development of children.

In order to lay down some lines along which the scientific study of the child should be pursued, certain foundational principles in the physiology of childhood may be profitably suggested. Child study, to be safely informing, must carry the student teacher back not only to the beginnings of infant life, but to an inquiry into those hereditary forces which so frequently and so deeply determine character. He cannot safely content himself with the attempt to discover the physiologic conditions of the child of school age. The teacher deals with fortunately plastic but nevertheless partially formed plasm. Development is, and education therefore must be, continuous, both in the individual and in the race. Dr. Oliver Wendell Holmes predicted his failure to correct the physical errors of a child because he had not had the opportunity to begin with his patient's grandmother. While the teacher is required to build upon foundations which are already partially laid, his knowledge of the ideal substructure of the human edifice will ultimately improve the building in the home, as well as the building in the schoolroom. The teacher is the most permanent of all builders, because that which he builds in the childhood of today tends to establish the type of the building of the generations which are to follow. He is a most potent factor in the evolution of the future, since that structural impress which he has years of opportunity to make upon the human organism fosters the hope of heredity. Without that structural change transmission fails. And this emphasizes the important consideration that he has to deal with a thing which is still in the making—in the making in a very essential physiologic sense.

Growth is the dominant characteristic of childhood, and one which is conditioned not only upon its rapidity, but upon its specific quality. Differentiation of structure and specialization of function are going on hand in hand, and that, particularly at this period, in the nerve tissues. It becomes the task of the teacher to foster the symmetrical development of the child both structurally and functionally. His aim is, or ought to be, the production of a perfect whole.

This burden of growth which childhood carries constitutes a heavy nutritive demand upon it. This demand is met by the large development in early life of the tissue-elaborating organs. They represent a very large percentage of the body weight of the child. Their functional operation requires an equally wide range. It must not be narrowed by the intrusion of other forms of functional activity of less immediate consequence. The need of tissue-building material in childhood is correspondingly large, and it should be remembered that this structural material includes water and oxygen in very generous measure. Teachers and school officials do not sufficiently appreciate the physiologic need of large quantities of pure air and pure water by the children during long school hours.

The process of digestion in the child, however advantageously simple the dietary may be, is relatively slow, and temporarily taxes the blood supply. It should not be embarrassed by an undue draft upon the circulation for the purposes of cerebral activity. For the school-going child the morning meal should be early; the noon meal light; an early evening meal staple. The school tasks with which morning and afternoon sessions begin should be easy, in order to allow time for the completion of digestion. The more difficult studies should be reserved for the intervals following recess. Seasonal variations in growth, particularly emphasized in the spring and autumn, should be respected.

In childhood, time is emphatically of the essence of function. The fund of potential energy stored by the tissue-cells is not large and it is rapidly expended. The periods of functional activity are therefore brief. The demand for repose is emphatic. Sleep is the period alike of construction and reconstruction. The more actively growth and repair are associated, the longer must be the interval of rest. Sleep is the overseer of the tissue-building process. To be effective, functional activity must be minimized; relaxation must be complete. Sleep-tension, a condition frequently observed in the overtaxed child, is a practical insomnia. It is a signal of nerve storm.

Not only is the range of physiologic activity in childhood a narrow one, but the pendulum of function is easily swung. Elasticity is alike a structural and a functional quality. It is illustrated at almost every point, in the wide and readily provoked variance in the caliber of the arteries; in the frequency and changing force of the heart-beat; in the rapid and deeper rhythm of respiration; in the sharp contraction and perfect reaction of the skeletal muscles; in the ready rise and fall of the temperature scale; in the quick response and the equally quick exhaustion of the nervous mechanism.

Valuable as this elastic quality is, it marks a tendency to extremes of which the educator must beware.

Emphasis has been put upon the prerequisite of symmetry in the development of the child. This demand does not predicate an initial symmetry to be preserved, but rather a symmetry to be attained. Asymmetry is a feature of early childhood. The task of the teacher is the cultivation of the child along asymmetrical lines to a symmetrical result. Success involves the study of the average structural and functional conditions of childhood at given periods, as well as a careful estimate of the degree of individual departure from this common standard.

A comparison of the structural conditions which obtain at birth is suggestive. In the new-born babe the nutritive organs show a percentage of body weight disproportionately great to that in the adult. The skeletal framework has reached and merely maintains its essential proportion. The muscular tissues represent only 23 per cent. of the weight of the young infant. They reach an average of 45 per cent. at maturity. The nerve tissues are relatively massive, representing from 13 to 15 per cent. of the body weight at birth, while they are wanting in that structural complexity and functional specialization which they attain, at the expense of bulk, in the adult, of whose total weight they bear but 2 per cent., or less.

The applications of this fact of physiologic asymmetry to the education of the child are manifold. The several strings in the human harp must be tuned and played upon in turn. They are of variant tensions and unequal lengths. Each must be developed in its fundamental quality or in its under- or its overtones of power until its pitch, variant from but relational to the rest, falls into place in the production of a harmonic composite. All the strings of function do not demand equal play. They do require exercise in turn. Alternation and brevity in their exercise are the elements of functional pleasure or interest. The whole gamut of activity, fitly touched, turns work into play at every point of contact and gives to recreative use the quality of rest. More, there is a tone-dominant in every human instrument which marks its individual quality, and which demands discovery by a master mind and cultivation by a master hand. But while the teacher discovers and cultivates, he does not create. Marchesi trains a throat and drills a tone to lingering sweetness, but never yet did a Marchesi make a voice. The child harp has its own specific vibrations, its own intrinsic hidden song. Strung to sympathy and tuned to response by the trainer's hand, life strikes at last its sympathetic chord and it sings itself. Again, every string cannot be played upon successfully by the same hand. Variance in exercise is not more important than variance in the exerciser. The grade teacher of today who is expected to serve as a mental acrobat in the teaching of a half a dozen topics for five days of every week and forty weeks of every year is an educational paradox in herself and a physiologic blunder in the education of the child. Specialism must go into the grades as it has partially gone into the secondary and wholly into the university schools. The teacher as a factor in the development of childhood will be potentized in direct ratio to the number of the years in which she is permitted to pursue the training of a given child, as well as in direct proportion to the degree in which she specializes herself in its teaching.

But perhaps the most significant physiologic feature of childhood, and that upon the recognition of which the success of the child trainer most largely depends, is the fact of the relative immaturity of the nervous system. The nervous mechanism of the infant is of great but undeveloped bulk at birth. It is an unmapped chart. Its functional activity, so far, is limited almost to the exercise of those rhythmic reflexes which represent the small funded capital—the transmitted quality of a few nerve cells. The avenues of special sense which serve as the fields of instruction along which impressions pass to the awakenment, the direction, the development of the dormant nerve centers have been, until birth, but closed pathways. They are suddenly opened up to a flood of influences. At once the differentiation of nerve tissue, the specialization of nerve function, begins. Under the influence of newly-operative stimuli, the end organs are at first uncertain in their responses; they manifest an irregular irritability; at first the paths of conduction along which impressions and impulses are conveyed are poorly insulated, and a certain vagrancy of transmission is observed; at first the nerve cells display a degree of instability, of imperfect storage, of disorderly discharge of energy. Gradually the specific quality of receiving cells, the lines of resistance along nerve paths, the intelligent reaction of nerve centers, become established. The education of the nervous mechanism is rapid, but it is essentially post-natal, and, however rapid, it is a long process by which it is brought up to the point of average contemporary development.

This educational process affects the evolution of two distinct yet related phases of function—that upon the afferent or impressional side, and that upon the efferent or actional side of this nervous mechanism. Upon the one side is involved the evolution of the properties of specific sensation, or the power to develop specific impressions; of perception, or the power to recognize the causes of such impressions; of judgment, or the power to compare impressions with each other; and, finally, of registration, or the impress of given impressions upon the nervous mechanism, to the end that they may be reproduced, upon similar stimulation, in the form of memory. This progression of function upon the afferent or impressional side of the nervous mechanism is essentially a matter of education. It involves the cultivation of all the avenues of special sense, and, in its highest results, the association of these several fields of instruction with each other.

The child trainer enjoys a large opportunity in the adaptation of the means of education to this great end. Certain primary principles must guide his task.

First, and perhaps of most important observance, the stimuli by which impressions are to be produced upon the nervous mechanism of the child should be self-chosen. So, and only so, can they be fitly graded to the degree of its development. Age is not an index to that development, and consequently it is not an intelligent means of school grading. More careful estimates of capacity should determine, from time to time, the classification of pupils.

Large opportunity should be provided for the child's voluntary comparison of stimuli to the education of his judgment. The application of given stimuli should be frequently repeated to the attainment of that permanent impress upon his nerve centers upon which registration or memory depends. Memory is a too contracted term which marks an undue limitation in the estimate of this registrative function. It is a trite saying that we forget far more than we remember. It were better said that we are unaware of how much we register. The field of unconscious registration is a wider one than that of conscious memory. Memory is but registration in act.

The more clearly cut in its character is a stimulus—that is, the more sharply contrasting it be upon the field of specific sensation—the more likely it is to produce a permanent impress. The teacher should study the mode of application of a stimulus or the method by which an object is brought under observation. The element of surprise is useful.

The invariable demand for what the physiologist terms reaction time in the development of an impression should be respected. Its duration varies in different individuals. The child who is said to be absent-minded is usually one in whom this reaction time is necessarily prolonged, or in whom it is occupied with a slow comparison of impressions, out of which sounder, safer judgments are born than are usually developed by a mind of readier response.

Stimuli are often employed in too rapid succession. Impressions crowd each other in the avenues of sight and sound and touch; they produce indefinite sensations or perceptions; they permit scant time for comparisons; they leave feeble impress at the best.

But that is not all. They intrude by their undue repetition upon the possibilities of education upon the other side of nerve function. They embarrass the actional result in which every nerve act completes its full cycle. The impression which does not have its counterpart in expression is in the end a bane rather than a benefit. The remarkable achievements which have been made in the teaching of the deaf or the blind are in part traceable to the fact that the teacher is compelled at every step to halt for the intelligent response of the pupil. A flood of impressions, flowing in fast upon the highly sensitized nerve cells of the child, and finding no outlet, becomes a physiologic burden upon the nervous mechanism, and in the end produces the overcharged, introspective, self-centered, unkinetic type of which modern society affords so many examples, especially of the feminine order, in whom action or expression is habitually disastrously limited.

Fortunately, the motor element in education has been of more clearly recognized importance in recent days. It is still of too limited appreciation. Action takes form in the finer as well as the coarser movements of the muscular tissues. In physical exercise it is trained only upon a broad field. In pose, in gesture, in facial expression, in speech, in song, in all varieties of manual training, it has opportunities of the most delicate culture. And in this actional phase of nerve function we witness the same progression of development that we have already noted upon the impressional side. From the simple reflex response the human nervous mechanism rapidly proceeds to the exercise of the nerve centers and muscular tissues in relation and eventually in co-ordinated harmony of result. Next, the co-ordinated act becomes habit — the acquired reflex — and habit gradually merges into those repetitional effects which determine structural impress and which fund themselves in those rhythmical reflexes which are exhibited in hereditary or instinctive acts.

The educator should note and foster this progression. It should be one of his continual aims to develop harmony of action, to make co-ordination habitual, to encourage habit to serve for the creation of a larger fund of hereditary capacity in the motor cells.

He should observe another foundational fact — that in their nature all forms of motor expression are rhythmic. Rhythm is the rule of function. It is simply another evidence of the physical fact, exalted into a physiologic law, that all matter, and especially all living matter, is susceptible of vibratory motion. Vibration is the essence of rhythm, of that rhythmic swing, of that rise and fall of functional activity, which, now within narrow range and again upon a broader plane, every organ of the animal body exhibits.

This rhythmic quality is a feature of all forms of motor expression. "Muscular movement," says Wilks, "is essentially rhythmic." "All movement," says Clifford Allbutt, "even the rush of falling water, is rhythmic." Roy observes that upon using a pencil to form a series of dots upon the surface of a sheet of paper, while the paper is drawn slowly along from right to left, a uniform number of dots per second is made.

Wallaschek tells us that "not in the different passions of the mind, but in muscular action, music appears to have had its origin." Allbutt again says: "The Greek strophe and antistrophe, the basis of rhythm (in music) — terms now applied to musical phrasing — were primarily dependent upon the movement, the dancing, of the orchestra from one side to another."

If musical rhythm, then, has originated in muscular movement, it follows that muscular movement itself, inspired by a nervous mechanism which pulsates in the discharge of rhythmic waves of energy, is essentially rhythmic. The regulation of that rhythm is part of the work of the educator. To cultivate its highest expressions, to vary its exercise, to change its measure, is to afford pleasure in work and rest in recreation.

Finally, the study of the physiology of childhood in its applications to methods of education must take account of the fundamental distinctions of sex. These differences are inalienable and are alike structural and functional. They are emphasized in the nervous mechanism of the child. The common view that these differences do not antedate puberty, that they are not to be recognized and need not be respected from infancy up, is believed to be a physiologic error. The writer has determined, in a long series of cases, the sex differences in heart-beat, in respiration, in digestive capacity, in emotional quality, in physical measurements, and in the limits of muscular and nerve power ranging from birth to puberty.

George Eliot's definition of woman as "morally superior, physically finer, and intellectually different" is inherently and originally and ineradicably true. Modifications of these differences may appear, but the types persist. They afford a basis for distinctive training, even within the coeducational limits of the public school. Education must still leave room for the characteristics of sex or it will be in the end deformative. Boy and girl may sit side by side and learn the same lesson, and yet be differently educated. Each should be taught what each instinctively knows — the fact of difference. Each should be taught to recognize that difference as the most sacred fact of each human life. The evolution of each sex must proceed along its own lines. The more sensitive organism of the girl makes her demand for physiologic consideration the more urgent. The dominant part which she plays in the evolution of the race makes the elevation of her type of largest consequence. As Lester Ward puts it, "woman is the unchanging trunk in the genealogic tree." Those educational methods must fail of their possibilities which do not take large account of the eternally feminine in nature, which tends, in the process of evolution, to its own inevitable and inevitably beautiful result.

DISCUSSION

E. A. Kirkpatrick, professor of psychology and child study, State Normal School, Fitchburg, Mass.—Much of what Professor Beard has said is not only unquestionably true, but so well stated that it is unnecessary for me to repeat, and unwise for me to attempt to restate. My time may be best spent in discussing points of difference, and in elaborating ideas which Dr. Beard had time merely to suggest.

I take exception, first, to the statement that child study has been pursued almost exclusively from the metaphysical standpoint, if by child study is meant what is now known by that term. The child study which is sometimes said to have been carried on by all educators from earliest times may have been of that kind, but certainly this is not true of the child study of the last decade. I am quite sure that of the list of books and articles bearing on child study, numbering over a thousand, which I arranged a few years ago, not 1 per cent. are metaphysical, properly speaking, and I should say that over 50 per cent. are more physiological than psychological.

It is true that educators never have, and do not even now, realize the closeness of relation of the physical and mental, but whatever sins modern child study may have been guilty of, failure to call attention of teachers to the importance of physical conditions is not one of them. Possibly, however, in emphasizing the need of taking account of defective and abnormal conditions of children, they have not sufficiently emphasized the correlations between physical and mental development in normal children. I think it is true, however, that physiologists generally have failed to appreciate the closeness of relation of bodily structure to nervous structure and function. If Professor Loeb's experiments and theories are substantiated by further investigation, we shall be compelled to look upon the nervous system as chiefly a transmitter of nervous energy from one part of the body to another. We shall not say, as we have been doing, that the hand is controlled by a certain group of nerve cells in the cortex of the brain, but that certain portions of the brain facilitate communication between sense-organs of the hand and other parts of the body and the muscles of the hand concerned in making the proper reaction. We shall not speak of the center controlling the heart, but of the portion of the nervous system that facilitates the transmission of nervous impulses from various parts of the body to the muscles of the heart. In short, we shall look upon the nervous system as a means of communication between every part of the body that may be stimulated and the muscles or glands that need to respond in an appropriate way. On this view the development of every organ and tissue is of direct significance in the development of the nervous system. Every change in every part of the body disturbs the fine equilibrium of the organism and calls for new adjustments. It is not surprising, therefore, that the age of adolescence, when so many marked physical changes are taking place in the structure and function of the body, is a stage of unstable mental equilibrium and variable action. If this view of the nervous system is supported by the physiologists of the future, as I believe it will be in the main, I am sure child-students will not be slow in calling the attention of teachers to its significance, as they have not been in the past in calling attention to what is known of the relation of physical defects to mental abnormalties.

Another point upon which I must beg leave to differ with Dr. Beard is one of application. I agree fully that the nutritive functions are of supreme importance in childhood, and that digestion should not be interfered with by excessive brain activity immediately after eating. His conclusions, however, that the harder part of school work should come after rather than before recess seem to me not justified by the conditions. Most children, especially among the laboring classes, bave had breakfast one or two hours before beginning school work. In the graded schools I think every teacher will agree that pupils are in much better condition for hard work at the opening of school sessions rather than near the close, when tired and hungry. In high schools, however, with only one session a day, where pupils study long on an empty stomach, or one containing two or three hastily swallowed, greasy fried-cakes, doughnuts, or "sinkers," as they are expressively called by the small boy, there is good ground for saying that the sins against physiological laws in the high schools are almost beyond forgiveness.

To finish briefly with all points of difference between Dr. Beard and myself: I see no occasion for "respecting seasonal variations in growth," and doubt whether the physical differences between sexes before ten years of age is sufficient to demand material differences in treatment. I even think it would be well for young girls not only to study as boys do, but also to play more boys' games, that they may develop physically and socially.

On all other points, most of which are much more fundamental than these, I heartily agree with Dr. Beard, and only wish I might more effectively emphasize them. Perhaps

I may best do this by briefly stating some of the differences between the nervous system of children and adults.

1. The nervous system of children is largely unspecialized, yet it is ready for action. Hence, in infants, there is a wonderful variety of aimless movements during all waking moments, and in childhood many more useless movements when trying to attain a definite end than in the case of adults.

2. For many years the child is in a state of very unstable equilibrium; consequently he is in all kinds of moods and has all kinds of interests within a space of time too short for an adult to get comfortably settled in one frame of mind.

3. Associated with this, as either cause or effect, or both, the child is very quickly fatigued by any one kind of activity. He needs frequent short periods of rest or change of occupation. Prolonged activity of one kind is desirable in adults, but utterly impracticable for children.

4. The motor or expressive tendency is much stronger in children than in adults, and consequently they tire of receiving much more quickly than of doing. Fatigue and a disturbance of the natural functions, with consequent lack of interest, stupidity, and confusion of mind, are the natural results of receiving impressions without opportunity or means of reacting to them in an appropriate way. The mental condition of educated adults who take in for hours and do nothing is wholly unnatural and incomprehensible to the child. From the earliest beginnings of nervous systems in the animal kingdom, nerve cells have helped in making an appropriate response to each stimulus as it was received. If education is to prepare for life, and still more if it is to result in living fully each stage of life, provision must be made for children to do something else besides frantically wave their hands every time they receive an idea. It is not that the motor side of a child's nature needs development by itself so that it shall not be exceeded by the sensory. There is nothing gained by equalizing the time devoted to impression and to expression if the processes are carried on separately, for successful living is nothing but making the proper response to each stimulus as it is received.

5. The nervous systems of children are exceedingly plastic, hence children can be taught anything or learn to do anything with almost any degree of accuracy. This ability to adapt itself to environment is the most striking and valuable characteristic of the young of all the higher animals. In man it is most prominent and for the greatest length of time. In our constantly advancing civilization men and women need to preserve this plasticity of the nervous system as long as possible, or they will fall behind in the race of life as customs, processes, and methods change. To this end variety in training is necessary, and only the universally useful activities should be allowed to become automatic habits.

6. Plastic as is the nervous system, and capable of being molded almost at will, we must not forget that it has a natural order of development as surely as the grain of corn produces leaf, stalk, tassel, and ear with never a reversal of this order. As fast as we learn this natural order we should strive to utilize it in hastening and perfecting the educational process. We shall then work according to the plans of nature, the great architect of the nervous system, in developing the highest type of men and women.

PROFESSOR BEARD.—In my paper I did not mean to assert that child study had been altogether limited to the metaphysical aspect, but that in the books on the subject this side had been overemphasized.

Referring to Professor Kirkpatrick's allusion to an empty stomach, I would say that when the stomach is empty digestion is not over, but that the largest events of digestion take place in the small intestines; so that, even in the case of the laboring man's child, with his early breakfast, the early exercises of the school should be light. The post-recess period is good for hard work because the recess poriod gives chance for large consumption of oxygen.

There is seasonable variation in growth; in spring the curve of height, in autumn the curve of weight, show a marked rise. At these seasons it is more difficult to make a successful impression on the mind of the child than at other times.

I should be the last to deprecate allowing girls all the freedom of motor expression which boys have; but should insist that there are intellectual differences. Not in the playground, but in the schoolroom, should differences on account of sex be made. Both sexes should choose for themselves their lines of work to a larger extent than is done at present.

HOW FAR DOES THE MODERN HIGH SCHOOL FIT THE NATURE AND NEEDS OF ADOLESCENTS?

REUBEN POST HALLECK, PRINCIPAL BOYS HIGH SCHOOL, LOUISVILLE, KY.

What is the nature of an adolescent? In many respects he is like the boy that has preceded and like the man that follows, but in some he is emphatically different. There seems to be no absolute break in nature, but between barren branches, buds, and full-grown leaves nature shows rapid progressive changes. Adolescence is one of nature's marked progressive changes. By adolescence we mean that period which begins approximately at fourteen and continues for an indefinite period. It is the most wonderful period in human life, the period that takes a child and makes out of him a man. The child is at first receptive and reactive. A flash of light or a noise assails his senses and he reacts. Memory, imagination, and the simpler processes of thought develop. In adolesence there appears a something as new as the spring buds on the branches. A creative spark is added to the mental life, a spark which the breath of education may fan into such a flame that the heavens may become light with the work of resulting poet, artist, or inventor. Roughly speaking, in adolescence creative capacity is added to the simpler mental powers. I do not mean that the adolescent ceases to be receptive. I am sure that the rank and file of men are and always will be more receptive than creative, but I do know that the creative spark alone will bring humanity to its full heritage.

Note that I am to speak of the high-school adolescent, not of adolescents in general. The high-school adolescent represents the fittest survivals of an elimination process that has been active for eight years. I am speaking of the pick of adolescents, of those whose influence will cause the world to progress. I bespeak for the high-school adolescent better treatment, better facilities, better-paid teachers of the broadest education. Some would emasculate the high school for the grades. I would improve the condition of the high-school adolescent, not alone for his sake, but for the sake of the balance of the world, which he is to elevate. It was right that at Valley Forge George Washington should have been better clad and less likely to catch pneumonia than the rank and file of the army, not for his sake, but for the sake of the millions to whom he was to pass the cup of liberty. It is time that the public school stopped teaching the lie of equality. I know a high-school graduate who managed a factory so well that it employed thousands. When he left it fell into less efficient hands. The wages of the workmen had to be lowered, many were discharged, and their families suffered. He was brought back and the factory prospered. Leaving his welfare out of the question, was it not better for the thousands that this manager should have had an excellent high-school education under the best possible teachers? I am a firm believer in the doctrine of the greatest good to the greatest number. I am, therefore, careful not to urge the necessity of giving the high-school adolescent the most inspiring teachers for his own sake, but for the sake of the many whom he is to benefit.

By nature an adolescent is akin to the Elizabethans. Adolesence is the Elizabethan age of youth; the age when all things are possible; the age when ships with tons of treasure are returning home from the new western world; the age when newly-discovered climes are proving the wildest dreams realities; the age when the Armada is defeated; the age when Shakespeare sings a new magical birth song. Then shines the light that never was on land or sea. The teacher who cannot enter heart and soul into this new Elizabethan age is unfitted for his task.

What are the needs of the high-school adolescent? First, he needs improved ideals. They will be found to lie at the basis of his improvement in all other lines. If, as the poet says, we needs must love the highest when we see it, how many schools, as part of their definite settled aim, give their students frequent glimpses of the highest in literature, in biography, in history, and, equally important, in contemporary life? Here are four worlds, for the most part new to the adolescent. Alas, that they should still be new to many of his teachers! Every teacher should every year send a ship on a voyage of discovery to these worlds, that she may return home laden with ideals, for there are gold mines of ideals in literature, biography, history, and contemporary events. Because the dreams of the adolescent so far surpass his feeble powers of achievement, he is unusually responsive to those stories and to those heroes that present to him an incarnation of what he would like to be. The shortest distance on earth is the distance from the adolescent's admiration to his imitation. I am not an advocate of promiscuous story-telling for high-school pupils, but every teacher of every high-school subject ought to be able to relate inspiring stories from biography, and to bring to bear on the formation of the ideals of those under them, not only the force of their own examples, but also the examples of the worthy men and women of every age and clime. An adolescent who does not know what hero worship is has not more than half lived. We have too long been feeding high-school adolescents on a disproportionate diet of stones, because we have not known the bread which literature, biography, history, and contemporary life offer. In their lives there should be nothing

> "But doth suffer a sea-change
> Into something rich and strange."

I believe that feminine ideals differ in many ways from masculine ideals. Both kinds of ideals are necessary, and each is equally important. In a well-rounded world there must be developed the power of repression as well as the power of expression, the spirit of conservatism as well as the spirit of radicalism ; there must be a fostering of the love of fight as well as a fostering of the love of peace, and there must be assured protection for the weak and vanquished as well as the laurel crown for those to whom strength has brought victory. Both the feminine and the masculine world have, to a certain extent, their own division of labor in the work of life. I protest against that high-school training which endeavors to make girls mannish and boys womanish. The girls and boys often protest, too, by leaving school when that is attempted. Their nature sometimes guides them right. If feminine tastes, emotions, hopes are not appealed to, the girl will be inclined to stop school. In matters of interest as various as reading and sports the tastes of girls differ widely from those of boys. That man who thinks that he can train boys to do everything that girls can just as well as they can do it is a fool.

It seems to me that a crying need in the education of adolescent boys is for more virility, more aggressiveness. Of course a ship with engines powerful enough to force her ahead in the teeth of a gale needs a rudder and good steering apparatus, but she does not require the weakening of those powerful engines. There is a time in the history of most adolescent boys who amount to anything when masculine restlessness and aggressiveness so assert themselves that the mother is sure that this stage in her son's development is "wrong." It would be just as sensible to describe as "wrong" the shedding of the tadpole's tail and the hopping of the resulting frog out on the bank where he can breathe the freer air. So long as there are in this world opposition to wiser plans, selfishness, dishonesty, crime, there must be masculine aggressiveness to deal with them. Education must develop this quality and hold it in reserve. I think of Runnymede, and Bunker Hill, and Gettysburg, and Santiago de Cuba, and I thank God for the masculine virility and aggressiveness that stood a victor on those fields. Our adolescent boy likes this aggressive education, because he springs from a race that today enjoys civil liberty, that today worships God in whatever church it pleases, only because his ancestors were aggressive. He learns to admire the aggressiveness of a Democratic president like Grover Cleveland and of a Republican president like Theodore Roosevelt. Do not be afraid of developing this virility and aggressiveness. It is well to have a gun loaded, but it need not be fired off at all times. This aggressiveness is not anti-social;

it is an antecedent condition of a social life. There can be no truly social life under a tyrant or the menace of an evil.

Next, it seems to me that training and development in the high school should be modeled more closely on the lines of life, if the pupil is to be fitted for the outside world. It used to be said that the gap was too great between the grammar and the high school, but that was nothing compared with the gap between the present methods in many high schools and in life. Mushy educational theory has laid down the dictum that rivalry is unsocial and ought to be kept out of the high school. A boy graduates and finds employment in a great railway system. He sees that it offers many prizes. If he has ambition, he wants to become head of a department or an official of the road. The surest way to win any of these prizes is to do the work better than someone else is doing it. We have progressed from savagery to civilization because of a determination on the part of some to do things better than others were doing them, to be gentler, kinder, truer, nobler than their neighbors. Rivalry has improved modes of travel, surgical instruments, footwear. This world without rivalry would be a dead world. It has developed on the principle of the survival of the fittest after a struggle to determine who the fittest are. I believe that school is a better place than life to meet jealousy and conquer it. I know a graduate who, influenced by jealousy and anger, gave up two good positions soon after leaving school because others beside him were advanced in preference to him. You may remove most of the causes of jealousy from the high school, but in so doing you are not training for life. I have a classmate who is principal of a high school in a prohibition state. He said to me: "I long ago realized the lack of wisdom in removing every apple tree from the adolescent's Eden. I prefer to develop in my boys the power to pass by an open saloon door, because I know that without this self-reliance he will easily fall a prey to the hidden back door." As the case stands, athletics is the only branch in many schools that trains to the exact conditions of life. Football is rivalry to the core, and it gives wonderful opportunity for the mastery of undesirable emotions. I believe that in almost every high school there is a pronounced feeling that, when B has shown himself a better boy than A, B should take A's place on the team. If A sulks for that reason, his treatment by the rest of the school soon teaches him something more valuable than book knowledge. I therefore wish that more athletic games involving group activity could be invented for adolescents.

I know that some teachers maintain that it would be better to change life rather than the high school. Consciously or unconsciously, they are swayed by the belief that the only true philosophy is socialism, which abolishes competition and largely destroys the incentive for one human being to do better than another. Socialism, they believe, is the remedy which will render things more nearly equal. That may be true, but with the incentive to do one's best gone, the equality will be the equality of the hovel, and not of the palace. From such an equality it is the mission of the high school to rescue us.

A high school often fails with an adolescent or damages him irreparably because of its atmosphere. Adolescents are unusually sensitive to that indefinable something known as "the atmosphere." It frequently determines their attitude toward life for the rest of their days. If there is a spirit of guying and mean prank playing rife among the pupils, if there are animosities among teachers themselves, if there is lack of an altruistic atmosphere, such a high school is not suited to the needs of adolescents. In visiting the same class in different rooms you have been startled at the change. The same class has seemed as different as the Berkshire Hills looked at thru the happy Indian-summer haze and again thru the driving March rain. You have felt that to reach the heart of certain classes you must select some rooms in which to talk to them and avoid others. Watch the atmosphere of your high school. If the pupils feel that everyone is their enemy, against whom they must be on the constant watch, it would be better if that high school were closed. If, on the other hand, all feel that the rest are their friends, that their presence in the school is nesessary, that the school expects them to do something worthy of it, that school is a pronounced success, even if its pupils learn nothing from books.

Do the high-school studies suit the nature and needs of adolescents? Shall these studies be made more practical? I have tried to get a jury to decide for me what the really practical high-school studies are, but there are only two subjects on which there is sufficient unanimity of agreement to make it worth comment. Most agree that it would be difficult to pay too much attention to spoken and written English and to the great things in our literature. The majority say that a part, a very small part, of the physics taught in our high schools is also practical. But when we mention mathematics there is an immediate protest that nothing is less often used by the rank and file of people than algebra and geometry; that a few arithmetical principles taught in the grammar schools are all that are absolutely practical. The chemist concedes that high-school pupils will probably make but very little practical use of what he teaches them. Modern languages are practical only in case the student is actually called on to write them or to speak them. The teacher of Latin can readily show that this study is as practical as zoölogy, but one can get along in practical life without either Latin or zoölogy. The historian insists that his branch it absolutely necessary as a guide for future action and legislation, but a careful inquiry among a large number of high-school pupils has shown that the majority believe that the study of history did them little practical good and left little else than a blur on their minds. Astronomy! Why that deals with the stars, and we may never visit them.

Shall we, then, confine ourselves to the strictly practical and teach nothing but common English, bookkeeping, shorthand, typewriting, and commercial geography and law in our high schools? Those schools that have narrowed themselves down to these subjects alone have been the most conspicuous failures of all. If they would succeed, commercial high schools have learned that they must include in their course many of the so-called impractical subjects. Even wood-choppers of ordinary intelligence are becoming gradually less influenced by the argument that they don't need a grindstone because it won't cut down a tree. They are satisfied to sharpen their axes on a Saturday, so that on the following Monday they can cut down trees with half the labor. Professors in German universities have noticed that since fewer hours were given to Latin in the German schools there has been a decided decrease in the capacity of the pupils for original thought. Adolescents must feel this truth in a dim way, for, altho Latin has often been put on the optional list in the last ten years, the number of those taking it has increased twice as fast as the enrollment. Nothing has yet been found to make it possible to dispense entirely with grindstone subjects. A striking confirmation of this comes from a most unexpected source. Commenting on technical secondary education, one of the greatest of technical-school presidents writes:

> The broader training of a well-organized English or classical high school should precede the technical course whenever possible.

We should not infer that all of these subjects, whether practical or not, are alike acceptable to all adolescents. A subject that one adult is fond of bores another. When we consider the variety of the future world to be ministered to, we must conclude that it is fortunate that human minds should be cast in such different molds. Adolescents ought to have this natural difference considered. I know numbers of cultivated people, some of whom have asked me to be their attorney on this occasion, to state that they were born with a dislike for certain subjects, and that their continued study merely worried them. The ideal high school should not only have different courses at the start, but after the end of the second year subjects like mathematics and Latin and much of science should be optional. In the majority of cases the adolescent must choose his occupation as soon as he leaves school, and it is wise to give him a little practice in choosing. The high school ought not to have a single weak teacher or a single weak subject. If all subjects were well taught, these optionals could not do harm, and they would develop the pupil's natural capacities, and thus lead to greater interest. I think that all high-school teachers will have more charity for their pupils by remembering that we do not expect adults to pay attention to things in which they are not interested.

I cannot agree with those who think that the requirements of the college have tended to make the high school less fit for adolescents. With increasing optionals, few pupils need to take college subjects unless they choose. My experience has convinced me that this course develops a fine type of pupil. The high school is largely indebted to the college for the strength and excellence of its most important course. Since the colleges have insisted on English as an entrance requirement, the high schools in some states have improved their English course 60 per cent. This course by itself has come to be sufficiently excellent to repay attendance at many high schools. College-entrance requirements are further useful in locating and in remedying inefficient work in certain branches. If any college insists on unreasonable requirements, the schools have their remedy in advising pupils to choose some other institution.

No matter what the subject taught, the majority of adolescents will not themselves be satisfied unless their teacher leads them to think. Thinking is rather a new game with them, but it is a fascinating game after it has once been tried, and it will never lose its novelty. Now that they can begin to steer for themselves by their newly-adjusted compass of thought, they will insist on occasionally sailing out of sight of land. Every adolescent loves the motor element in his mental world. A new definition of motor training has become absolutely necessary. Consciousness in itself has motor elements, but these are very slight when one is memorizing blindly or merely imitating with hands or feet. Motor action without the creative mentality born of imagination and of thought is machine action; it is the activity of a man whom a machine may supplant any day. Thought, the most intense motor element in consciousness, is the highest type of motor-mental action. The mind of the engineer in planning a bridge is more truly motor than the arm movements of those who put the matter where his mind has ordered. It is easier to find a thousand who can make matter fit the mental mold than it is to discover one who can himself make the mental mold which must precede all purposive changes in matter. Unless studies are of this higher motor type they are not bread to the adolescent.

With the old-fashioned method of studying many things, which held that a thing was learned when it was lodged in memory, consciousness has slight motor characteristics; it is like the river Arar, you cannot tell in which direction it flows. With memorized demonstrations in geometry this is specially true. In a visit to one of the great eastern colleges last month, I noticed that 50 per cent. of the examination consisted of originals. The mental state of the candidates taking that examination was certainly motor. Perhaps English literature, especially Shakespeare, is superior to any other subject in the course, when taught in a motor way. Give a pupil a chance to do some live thinking in Shakespeare and note how readily he responds. I told a ninth-grade class reading the *Merchant of Venice* that I should hold each one responsible for his individual opinion, supported by Shakespearean passages, on questions like these: "Was Jessica's treatment of her father right?" "Which character in the play would you prefer for an intimate friend?" The answers often surprised me for breadth of thought and interest in the comparisons. High-school pupils like to think if you give them something which touches their world to think about. Interest is knowledge moved into the king's row on the checkerboard. Fortunately interest comes with each succeeding step of knowledge, if the pupil can make use of it himself, if he can himself play with the checkers of knowledge. For instance, as soon as he has learned sufficient Latin to translate a "boy's girl" or a "girl's boy," by combining a genitive and a nominative, he is interested in the process. It is his own combination made with his own knowledge. Rendering English into Latin necessitates original motor-thought training far more than translating Latin into English. In this connection it is interesting to note the confirming experience of an examiner of the University of Berlin, who in 1897 testified that, with the change in the study of Latin since 1892, the power to translate it had not been much weakened, but that the ability to write Latin prose had been ruined, and that there had followed an actual decrease in mental power.

It is the doing something that appeals to the adolescent. Mere imitation in either the mental or the muscular field appeals less and less strongly to him. The high school ought to afford pupils more varied ways in which to express their thoughts, or, in other words, to show what they can do. In my own school I have founded an Order of the Knights of the Round Table, admission to which is based solely on doing something, if only one's duty, a hundred times out of a hundred.

Finally, let the teacher remember that adolescence is the Elizabethan age of youth; that then appears a spark of creative activity, which the proper training may fan into a blaze; that the ideal is all important, hero worship a necessity; that feminine and masculine ideals differ and that both are equally important; that masculine virility and aggressiveness must be encouraged; that the school must more nearly approximate to the condition of outside life, just as athletics do; that the atmosphere of the school should be social and altruistic; that no high school can succeed if it teaches only the so-called absolutely practical subjects; that any grindstone subject is practical in the truest sense if it sharpens the mental ax to fell trees in the forest of life; that the ideal high school containing not a single weak subject or weak teacher should allow increasing choice of subjects to suit varied types of mind; that the majority of adolescents will themselves pass the verdict on any teacher of any subject that he has given them a stone instead of bread, unless he has taught them to think, unless he has done something more than lodge a series of dead facts in memory, all of which will perish unless they sprout with the life of thought, unless he has taught them to use this knowledge in the varied combinations of their own mental life.

DISCUSSION

E. G. **LANCASTER**, professor of psychology and pedagogy, Colorado College, Colorado Springs, Colo.—I do not agree with the speaker as to the definition of the adolescent period. It is not merely the high-school age, but begins during the last two years of grammar grade and continues thru college life. It is the period of growth in which the child develops out of the stage of primitive man into the modern civilized man. This growth means, first, development in size; second, differentiation. The tadpole which is kept in the dark will grow to be a large tadpole of the size of the frog, but will never develop into a frog. There are men and women tadpoles, morally and intellectually undifferentiated.

The adolescent period ends, for the girl, at about the age of twenty-five; for the boy, at twenty-eight. The hope of the race depends on the lengthening of the adolescent period, say, until forty.

As to the question of the fitness of high-school studies to adolescents, the speaker has implied that they do and that they do not fit, and I agree with him. Rather than prepare a high-school course of study, I recommend to the audience the paper by President G. Stanley Hall, of Clark University, in the *School Review* for September.

Adolescensce, as the speaker said, is the time of ideals. We should use those ideals for discipline, and should discipline only thru ideals. Practical considerations are not so important in the high school. The average age of the inventor is thirty-three.

The old psychology laid down the three fundamental principles of mind—knowledge, feeling, will. This is not the order of the unfolding of the human mind. Feeling comes first. Nothing is done without enthusiasm. In the properly trained child the emotions are not very prominent until adolescense, and then they come in a flood. We must take account of this emotional life. Any subject that lays hold of the emotional life is a good subject. Is it Latin, geometry, physics? This depends on the teacher, on the way in which the subject is taught. We need teachers who understand adolescent psychology. The dull teacher, without enthusiasm, is unfit for adolescents.

DEPARTMENT OF PHYSICAL EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 9, 1902

The meeting was called to order in the Exposition Auditorium at 2:30 P. M. by the president, Dr. William O. Krohn, of Chicago.

After an overture by the Danz Orchestra, Director D. H. Painter conducted a class in tactics, uniform rank, Adams School.

The president's address followed, on "'Educative' Physical Education." Dr. Krohn thanked the large audience that had assembled for their interest in this branch of education, and said: "Not only is this the largest session this department has ever had at any annual association, but the largest attendance any department has ever had." Six thousand people were present at the meeting.

The remainder of the afternoon was devoted to the exhibition work of the Minneapolis public schools, given by pupils and teachers under the direction of Mrs. Louise Preece, director of physical training, city schools, Minneapolis, Minn. The program was as follows:

Holmes School: Director, Agnes L. Robinson.
Bremer School: Director, Agatha B. Morris.
Clinton School: Director, Elizabeth Conner.
Harrison School: Director, Agnes M. Price.
Van Cleve School: Director, Mary F. Regan.
Washington School: Director, Jean L. Gowdy.
Teachers' Class: Director, Mrs. Louise Preece.

The president appointed the following Committee on Nominations:

Miss Mary H. Ludlum, St. Louis, Mo.
Mrs. Louise Preece, Minneapolis, Minn.
Miss Mabel L. Pray, Toledo, O.

SECOND SESSION.—THURSDAY, JULY 10

The meeting was called to order at 2:30 P. M. in the Exposition Auditorium by the president.

A violin solo was given by Miss Verna Golden, of Minneapolis.

A paper on "Requirements for Physical Education in our Public Schools" was read by Dr. Henry Hartung, member of the board of education of Chicago, and delegate from the North American Turner Bund.

After another solo by Miss Golden, discussions were led by Dr. E. A. Lyttle, state inspector of New York, and by Miss Jean L. Gowdy, principal of the Washington School, Minneapolis, Minn.

Mr. Henry Suder, director of physical training, Chicago public schools, then gave an exhibition on his new combination apparatus to be used in schoolrooms.

The Committee on Nominations reported the following officers for the ensuing year:

President—Dr. William O. Krohn, Chicago.
First Vice-President—Baroness Rose Posse, Boston, Mass.
Second Vice-President—Mabel L. Pray, Toledo, O.
Secretary—Alta Wiggins, Buffalo, N. Y.

The report of the Nominating Committee was accepted without dissent, and the nominees declared elected.

The department then adjourned.

MABEL L. PRAY, *Secretary*.

the classification of our pupils with reference to class work in physical education than age or grade. Because certain groups of pupils happen to be reading in the same reader, or working the same problems in arithmetic, or because a certain group of pupils happen to be of the same age, does not give us warrant for putting them thru the same physical training, for the reason that of a given number of pupils of the same age, or of the same school grade, many will be much farther advanced in their physical education than others. A better basis of classification than age or grade is weight. A still better basis of classification would be weight and height. I have seen in the public schools of one of our cities a class of boys of the same grade taking their lesson in physical education. The difference in weight between the lightest and heaviest boy taking the same routine of exercises was forty pounds. The difference in height between the shortest and the tallest boy was thirteen inches. If the exercises were adapted to the heaviest boys in the class, they were certainly not adapted to the lightest; if they were adapted to the tallest boy in the class, they were certainly ill-adapted to the shortest boy. Roughly speaking, the difference in physical development, as represented by the two extremes in this particular class that I have in mind, was at least two and one-half years, the best-developed boy in the class being at least two years and a half farther along in his physical development than the least-developed boy. If the exercises of this particular lesson that I have in mind were educative for the average child in the class, they were certainly not educative for the best-developed or least-developed boy.

There are three characteristics that should mark each lesson in physical training: First, quickness; second, grace; third, precision. If any fact has been established as a result of modern researches in physiological psychology more plainly than any other fact, it is that of the reciprocal relation of mind and body. The mind acts upon the body, and the body acts upon the mind. We know that any change in the quantity or quality of blood supply acts directly upon the brain cells, and thus influences our entire range of mental activities. We know that certain drugs, such as phenacetine, accelerate those activities, while other drugs, as the bromides, inhibit these activities. On the other hand, while we all admit that body acts upon mind, we must also recognize the fact that mind acts upon body, that every thought we think, every emotion we feel, registers itself upon the organism; that there is a different rate of heart-beat, a different kind of pulsation, during the solving of a mathematical problem from that accompanying the reading of a poem; that intellectual activity directly affects the blood supply; that grief, melancholia, and other emotional states affect many of the secretions. It is just as true that anxiety, grief, melancholia, or any state of mental depression, causes loss of appetite, retarding the flow of the secretions, as it is that the improper action of the digestive organs may cause melancholia. The relation between ideas and movement has been recognized by many of our schools of physical education, and in all of our exercises we should endeavor and insist upon real enthusiasm and real purpose before any attempt at expression is allowed. The child must have a definite notion of the exercise, and having this definite notion must enter into it with enthusiasm, so that the exercise will accomplish the most possible for him.

I stated that quickness is one of the qualities that should characterize every lesson in physical education. If we do not develop an alertness, not only a physical alertness, but a mental alertness, we are failing signally in our endeavors ; if we are not developing grace then we are failing dismally to make more and more possible a ready co-ordination of the muscles as expressive of mental states. Without precision our exercise will be in vain. If the exercises do not promote quickness we are developing as a result a brain lethargy or brain *slowness*. If our exercises do not develop a certain marked physical grace there is, as a result, a brain slovenliness. If they are not carried on with precision there is, as a result, a brain disorderliness which cannot be eradicated by ordinary schoolroom methods.

Your physical education, to be educative, must have in mind first of all the development of mental symmetry ; in the second place you must have in mind development of mental force ; in the third place your exercises, to be fruitful of good results, must promote an increased mental activity. These three — mental symmetry, mental force, mental activity — must enter into every lesson if that lesson is to be educative.

Some have the idea that physical exercises in the schools should be simply ornate or recreative, rather than educative. Many schools have provided for physical exercises in the grades without an intelligent notion of the educational function that this provision is to afford. We are prepared, however, to make this broad declaration, and not without careful thought: that those physical exercises which do not have a part in the real education of the child, the education of his mind and brain, as well as a mere employment of muscles for a few minutes, the ornate movements so fully elaborated without any definite idea of their educational content or purpose, are not only negative as far as educational results are concerned, but are injurious and harmful. Just as some mental exercises are extremely beneficial to the child of ten, and other exercises are negative,and still others are injurious, so certain methods and lessons in physical training may be beneficial to the child, may be totally without result, or may be harmful.

The one supreme test that should measure every lesson in physical education is the educational test. Does this or that exercise give the child a better co-ordinated brain life, a better mental symmetry, increased mental force, accelerated mental activity? Are we developing his brain into that hair-trigger condition that will enable it to respond quickly to outside stimulus as he pursues his other lessons in the school ? Are the physical exercises we plan for him of neceseity going to result in a better the classification of our pupils with reference to class work in physical education than age or grade. Because certain groups of pupils happen to be reading in the same reader, or working the same problems in arithmetic, or because a certain group of pupils happen to be of the same age, does not give us warrant for putting them thru the same physical training, for the reason that of a given number of pupils of the same age, or of the same school grade, many will be much farther advanced in their physical education than others. A better basis of classification than age or grade is weight. A still better basis of classification would be weight and height. I have seen in the public schools of one of our cities a class of boys of the same grade taking their lesson in physical education. The difference in weight between the lightest and heaviest boy taking the same routine of exercises was forty pounds. The difference in height between the shortest and the tallest boy was thirteen inches. If the exercises were adapted to the heaviest boys in the class, they were certainly not adapted to the lightest; if they were adapted to the tallest boy in the class, they were certainly ill-adapted to the shortest boy. Roughly speaking, the difference in physical development, as represented by the two extremes in this particular class that I have in mind, was at least two and one-half years, the best-developed boy in the class being at least two years and a half farther along in his physical development than the least-developed boy. If the exercises of this particular lesson that I have in mind were educative for the average child in the class, they were certainly not educative for the best-developed or least-developed boy.

There are three characteristics that should mark each lesson in physical training: First, quickness; second, grace; third, precision. If any fact has been established as a result of modern researches in physiological psychology more plainly than any other fact, it is that of the reciprocal relation of mind and body. The mind acts upon the body, and the body acts upon the mind. We know that any change in the quantity or quality of blood supply acts directly upon the brain cells, and thus influences our entire range of mental activities. We know that certain drugs, such as phenacetine, accelerate those activities, while other drugs, as the bromides, inhibit these activities. On the other hand, while we all admit that body acts upon mind, we must also recognize the fact that mind acts upon body, that every thought we think, every emotion we feel, registers itself upon the organism; that there is a different rate of heart-beat, a different kind of pulsation, during the solving of a mathematical problem from that accompanying the reading of a poem; that intellectual activity directly affects the blood supply; that grief, melancholia, and other emotional states affect many of the secretions. It is just as true that anxiety, grief, melancholia, or any state of mental depression, causes loss of appetite, retarding the flow of the secretions, as it is that the improper action of the digestive organs may cause melancholia. The relation between ideas and movement has been recognized by many of our schools of physical education, and in all of our exercises we should endeavor and insist upon real enthusiasm and real purpose before any attempt at expression is allowed. The child must have a definite notion of the exercise, and having this definite notion must enter into it with enthusiasm, so that the exercise will accomplish the most possible for him.

I stated that quickness is one of the qualities that should characterize every lesson in physical education. If we do not develop an alertness, not only a physical alertness, but a mental alertness, we are failing signally in our endeavors ; if we are not developing grace then we are failing dismally to make more and more possible a ready co-ordination of the muscles as expressive of mental states. Without precision our exercise will be in vain. If the exercises do not promote quickness we are developing as a result a brain lethargy or brain *slowness*. If our exercises do not develop a certain marked physical grace there is, as a result, a brain slovenliness. If they are not carried on with precision there is, as a result, a brain disorderliness which cannot be eradicated by ordinary schoolroom methods.

Your physical education, to be educative, must have in mind first of all the development of mental symmetry ; in the second place you must have in mind development of mental force ; in the third place your exercises, to be fruitful of good results, must promote an increased mental activity. These three — mental symmetry, mental force, mental activity — must enter into every lesson if that lesson is to be educative.

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The one supreme test that should measure every lesson in physical education is the educational test. Does this or that exercise give the child a better co-ordinated brain life, a better mental symmetry, increased mental force, accelerated mental activity? Are we developing his brain into that hair-trigger condition that will enable it to respond quickly to outside stimulus as he pursues his other lessons in the school ? Are the physical exercises we plan for him of neceseity going to result in a better sense discrimination, a brighter eye, a keener ear, more delicate touch, better attention, and more tenacious and more spontaneous memory, more accurate judgment and reasoning? If they have not these ends in view then are our efforts misdirected.

My one word to you this afternoon is that our work in physical training should he educative rather than merely recreative, or, better, should be educative and recreative, recreating those impoverished brain cells by furnishing them with rich, newly-oxygenated blood that has been rejuvenated as a result of intelligent lessons in physical education. Not only can these exercises be made to develop and maintain a high order of brain integrity, but it is also true that these physical exercises may be made to obviate mental abnormalities that have already fastened themselves upon the child. The effects of good physical training in the school are to diminish the number of cases of brain disorderliness and the number of dull children. During the past five years I have gathered sufficient evidence to demonstrate that it is unquestionably a fact that in the school without physical training the number of both boys and girls with abnormal nerve signs, such as weak hand balance, lordosis, bagginess under the eyes, spontaneous finger twitches, and wandering eye movement is much larger than in a school with physical training; and furthermore it is true that in the schools without physical training there is always a larger proportion of boys and girls classed by their teachers as "dull pupils," and this cannot be attributed to other causes, such as low nutrition, because the social conditions obtaining in the two schools were the same. It can only be ascribed to the absence of physical training. Physical training, if it is educative, always tends to improve the brain condition of children, prevents and even remedies brain disorderliness, promotes healthy activity of both mind and body, and develops, not only physical grace, quickness, and precision, but develops, furthermore, a mental symmetry, increased mental force, and mental activity. Our physical exercises, to be educative, must be so devised and adjusted as to exercise all parts of the brain. We know that when a muscle is supplied with good blood and is stimulated to action it grows. We also must recognize that the nerve centers of the brain, which stimulate the muscle and initiate its action, are affected at the same time, and that these nerve centers will act on future occasions with more exactness and with greater quickness when the same exercise is to be carried out.

The object of physical exercises in any class in physical training must be to control this or that group of nerve centers in the brain, increasing in this manner the quickness, precision, and association of their activities together. As a result of this, with the proper range of physical activities appealing to all of the brain centers, a well-organized system of physical education cannot help but result in a firm building of a healthy brain, that will always act with integrity.

REQUIREMENTS FOR PHYSICAL EDUCATION IN OUR PUBLIC SCHOOLS

HENRY HARTUNG, M. D., MEMBER OF BOARD OF EDUCATION, CHICAGO, ILL.

Physical training in its numerous aspects has gradually come to be a prominent feature in most of our educational institutions, as well as a daily requirement in the life of people of culture. Bicycling, lawn tennis, golf, rowing, swimming, the various ball games, and other popular forms of athletics known and practiced for many years by a privileged few, are more and more indulged in nowadays by the masses. Penal and reformatory institutions have introduced gymnastic exercise as a factor for the moral and physical improvement of their inmates, and have recorded splendid results therefrom. Military schools and academies have made it a part of the training of their pupils. There is hardly any up-to-date physician who does not employ physical exercise, in active or passive form, for many bodily ailments, defects, or functional disturbances of the different organs of the body.

Business-men, laborers, and people engaged in professional work, men and women, young and old, flock to the gymnasium or practice at home for the purpose of recuperation, stimulation of bodily development, or to counteract the effects of a more or less one-sided health-impairing occupation, to regain that physical vigor, strength, and mental equilibrium which is absolutely necessary for every individual in his everyday struggle for existence.

Our higher institutions of learning have special departments of physical training, placed under the supervision of well-qualified professors, who, by special measurements and prescribed exercise, aim at the physical perfection of every student and prepare the better ones for contests in team work and the higher forms of athletics. At last physical education is also being recognized as a matter of necessity for the education of our children, and is slowly but steadily gaining admission to the curriculum of many school systems.

This great variety of application of physical training naturally implies manifold requirements and ideals, attained only by methods and means specially designed for such special purposes. Thus it can readily be seen that the aim which the physician has in mind does not coincide with that pursued by the college athlete, and that aims and methods adapted to a military training school would not be appropriate for the worn-out business-man who looks to gymnastics for recreation and recuperation only. And again it is obvious that the principles guiding us in the physical training for school children must be different from those that govern any of the other cases.

Unfortunately, tho, we see in many instances our schools invaded by all sorts of physical-culture enthusiasts and self-constituted specialists, apt to harm the cause of physical education more than to further it. It is thru such people, lacking all qualifications for this particular work, and their faulty, one-sided, and inadequate systems of training, that this important educational branch has come to be looked upon in some cities as a fad, and been justly criticised and ridiculed.

The condition in which we find ourselves at present in regard to physical training may be likened somewhat to that of medicine, where the true and rational art of healing, as practiced by the regular physician, finds itself surrounded by innumerable systems of isms and paths, all-cure people, quacks, and humbugs, who each one detracts as much from the dignity of the medical profession as physical-culture quacks injure the cause of bodily training.

Since we still find a great diversity of opinion as to the fundamental principle for a perfect system of physical culture for our school children, it seems timely and advisable for teachers of this special branch to agree upon some common, rational basis which meets all ordinary requirements for the average graded school of our country.

ITS PROPER PLACE IN THE SCHOOL CURRICULUM

One of the first and most important requirements is to give physical education its proper place in the school curriculum. Our educational ideals are still footing too much in the antiquated conceptions of mediæval civilization, when there was no education but that of the mind, when the body belonged to the devil, and was just good enough to be maltreated and chastised by all sorts of tortures. Slowly and gradually this emancipation of the body from its bondage has taken place, and as years advance and progress enlightens we hope that the body will receive its due consideration. It has been in the interest of a certain class of people to keep mankind in darkness and confusion in regard to the proper relationship between body and mind. The world has been taught for centuries that mind and body were two separate beings, existing side by side, and created for independent activities and purposes; the one the slave, the other the master.

Modern science has taught us that man is an organic unit and that there exists a mutual relationship and interdependence between mind and body. It is just as true that mental activities may exert an influence on the body as that physical activities may produce corresponding effects on the mind.

To mention only one instance of the truth of this statement, permit me to call attention to the results of the child-study investigations as carried on with thousands of pupils of St. Louis and Chicago, which have established the fact that there is a distinct relationship, in school children, between physical conditions and intellectual capacity, the latter varying directly as the former.

It is only recently that educators have paid more attention to this process of correlation between physical and mental activities and have begun to recognize it in their methods and theories of teaching.

In all those schools where physical training has been given a permanent place and a fair trial, its great value has been demonstrated and acknowledged. May it suffice to quote in proof hereof a few words from one of the foremost educators and thinkers that America has ever produced, the late lamented Colonel Parker:

> It may never be known scientifically what a tremendous influence the body and all its organs, every nerve and muscle, vein and artery, exert upon the brain, and consequently upon the intellect, and the more I see of the good work (of physical culture) in the school, the more I believe in it; the more I study psychology, especially physiological psychology, the stronger my belief becomes in physical training.

AIMS AND PRINCIPLES OF THE SYSTEM

Being convinced of its absolute necessity and extreme value as a factor in modern education, we demand that physical education, with its manifold powers of sensory, motory, and intellectual training, be given just as much attention as mental education, and only when this demand is realized can we ever hope to do justice to the growing child, produce a more harmoniously developed race, and reach a plane of civilization such as had been established thousands of years ago by the people of ancient Hellas.

To attain this lofty ideal it is, first of all, necessary to lift physical culture, or whatever goes by this name at present in many of our school systems, from that inferior position as a remedial or therapeutic agent, as a repair department for sins committed by faulty and obnoxious school methods and ways of living, to a higher level, and place it on a sound foundation as a truly educational department.

Therefore, we consider it the first and foremost requirement of any good system of physical education for our public schools that it have for its aim and object the harmonious development of all the different elements and organs of the child's body, according to well-defined physiological, psychological, and pedagogical laws. As such it must furnish the foundation upon which all the higher mental and moral faculties may be built up. The results to be aimed at by such a rational system of training must be:

1. Health, by which we understand the proper activity of all the organs of the body.
2. Grace and agility, implying the correct carriage of the body, and such control over the neuro-muscular systems as to perform movements of trunk and limbs with the least expenditure of energy and time.
3. Vigor or strength, by virtue of which we train and test the powers of the body to such a degree as not to endanger its health or structures.
4. Training of the special senses, mainly those of sight, hearing, and touch, endeavoring to acquire a multitude of conceptions and correct judgments based on such sensory impressions.

5. Such psychological phenomena as are a direct result of the proper training of the motory nervous system, comprising all those higher motor impulses which are necessary for the building up of will-power and character, and which are recognized as obedience, precision, submission to rules and orders, perseverance, courage, self-reliance, and self-control.

The laws according to which such a system should be built up must be, as stated before, in conformity with physiology, psychology, and pedagogy. Physiology must serve us as much in a negative as in a positive manner. While it teaches us in a general way the good effects that physical exercise has upon the various systems, especially those of locomotion, circulation, and respiration, and helps us to select proper work adapted to the physical condition of the pupils, it cannot be made the sole foundation for an adequate system of training, as, until now, no one has yet determined the specific value and influence of certain movements upon special muscles, nerves, bones, blood vessels, the heart, or lungs. Therefore, anatomical and physiological considerations can guide us only in a general way; they are of a greater importance, however, from a negative point of view, teaching us to avoid all such exercises as may be injurious and therefore contra-indicated.

It is evident that, in regard to methods of teaching, this special branch of school work must be subject to the same principles as any other elementary branch of our curriculum; must be graded in a logical, systematic way, and adapted to the different stages of bodily development of the pupils. Progression must follow, as much as possible, the laws of growth and exercises arranged in conformity with ordinary school classifications for the kindergartens, primary and grammar grades, and high schools.

When should children be required to take regular exercises? From the first year of school life to the last—subject, of course, to variations in form and intensity. In the primary grades they should follow up the work in the kindergartens, and they are just as necessary there as in any other grade, especially as they are admirably adapted to furnish the foundation for most of the higher forms of co-ordinate motor and mental activity. Here they should take, as a general rule, the form of games and plays, calisthenics, and be of such a nature as to stimulate growth and agility. From year to year there should be an increase in variety and difficulty; exercise of swiftness should be followed by those requiring endurance, strength, and dexterity, culminating in the high schools in the various branches of athletics and field sports. Gymnastic games and plays should be a prominent feature for every age.

Classes in physical culture should be graded rather on a physical than on an intellectual basis. While it is necessary under present conditions to drill large masses simultaneously, we must not lose sight of the wants and needs of the individual pupil; but to make the individual the center of the whole system, as is often suggested by physicians and people engaged more in therapeutic than educational gymnastics, is entirely out of place and wrong, considering that in some of our larger cities thousands, or even hundreds of thousands, of pupils must be cared for physically every day. Such a system of individual training may be the proper one for house and home training, or for a university where a small number of individuals are prepared for athletic specialties; it may also become a feature of necessity with children poorly developed or suffering from special defects; but it does seem ridiculous under the present conditions to suggest, for instance, that each of the 270,000 pupils of the Chicago public schools should be subjected to a special physical examination and anthropometric measurements in order to prescribe separate exercises for each individual even once annually. There is absolutely no need for any such proceedure, just as little as for giving every child his lesson individually in reading, spelling, or arithmetic.

Just as we assume a certain average of mental capacity for each separate grade, in accordance with which we adapt our lessons in the elementary branches, we may give physical culture in relation to an average type of physical development for every grade without much harm to the individual.

If it is possible, and does not interfere too much with other school work, subdivisions should be made in each grade, placing pupils with the highest physical qualifications in one squad, the medium ones in a second, and the poor ones in a third. The best way, however, of being as just as possible to the individual, and still adhere to the collective training of large masses, is by taking gymnastics entirely out of the schoolroom and placing it where it really belongs—in the gymnasium—limiting classroom practice wholly to calisthenics for recreation and to counteract the effects of mental overwork.

This leads us to the consideration of another object of physical culture in our schools, which, however, is only of secondary importance to its educational mission, namely: Its office as a hygienic or therapeutic agent. As such it restores the mental and physical equilibrium of the pupil, counteracts the effects of mental overwork and the various impairments due to and resulting from school life, builds up weak and poorly developed pupils, and looks after the correction of bodily defects and deformities.

It is a deplorable fact that even in this rôle gymnastics are at present a matter of necessity in our schools, and are of great value, as long as our schools and educational methods are not yet in harmony with sound physiological and sanitary requirements; but it will disappear as such with improvements in sanitation in schools and houses, and perfection of principles of teaching; when we have fewer hours of school work, no home study, fewer pupils in a room, proper adjustment of seats a desks, sufficient heat, light, and ventilation, better arrangement of school programs, more attention to the hygiene of sex, the proper diet, medical examination of school children, and individual care for pupils who do not come up to the physical and mental standard. General and personal hygiene should have a place in every school curriculum, but it should be taught as a separate study outside of the department of physical education. The physical director cannot, and should not, take the place of a medical examiner and sanitary inspector in schools, except he be properly qualified for each kind of work and be employed for one school exclusively.

Special exercises of a corrective nature should be prescribed for pupils who are below the average of physical development of their grade, and also for those who suffer from defects or deformities and bad habits of carriage of the body. This special instruction should be given under the supervision of a qualified physician, and outside of the regular school hours. The treatment of the more serious forms, of course, does not come within the province of school training, and must be attended to at home.

Having determined the requirements as to the proper system and methods of teaching, what are the requirements we must make concerning the teacher of physical culture, the place and time of practice?

AS TO THE TEACHER

Physical culture is in some respects a much more difficult subject to teach than any other educational branch, especially where it must be adapted to large masses. Very much, then, if not everything, depends upon the efficiency of the teacher. If he be the right kind of a man, gifted by nature with all the qualities that make a pedagog and a master of his art, a person imbued with the dignity of his profession, with an ardent desire to do credit to himself and to his calling, good results will undoubtedly follow his labors, and it will be an easy matter for him, by the results of his work, to convince the public at large, and educators in particular, of the extraordinary value of proper physical training. It will not do to have this important branch taught by mere drill-masters, military instructors, ex-circus performers, or college athletes, according to arbitrary notions or cut-and-dried rules.

Time was when anybody, by reason of some special gift of nature or result of training in athletics, considered himself well qualified to teach physical culture, and, managing to get himself on the pay-roll of some school, began to treat or maltreat children according to his individual conceptions. Owing to a more general demand for physical education, the last decade has seen the production of a small army of self-constituted professors and physical directors, some of whom are no more fit for the position of a teacher than a medical quack is entitled to the position of college professor. Still, they flourish, and as long as the public in general, and school boards and superintendents in particular, are much in the dark as to the real object of physical education, they find their positions well-paying sinecures. They are the creators of monstrosities of so-called systems of physical culture, and do not hesitate to display their ignorance by even publishing books on the same.

In spite of this oversupply of so-called teachers of physical culture, there are, to my mind, but few who can justly claim this distinction. The ideal teacher of physical training is a rather rare specimen of manhood, embodying qualifications which are seldom found perfected in one person.

If possible, he should be a graduate from a normal school, or be sufficiently familiar with the fundamental requirements for elementary teaching, and well informed on the subject of general education.

Gymnastics, well taught, are rich in impulses for developing will power, good habits, and a strong moral character, but it requires a thoroly trained master to impart these principles.

In addition to this general teachers' training, he must be intimately acquainted with those special sciences which are closely related to his profession. He must know the laws pertaining to the physiology of exercise, mechanics of movements, anthropometry, hygiene, physical diagnosis, and naturally the theories and principles underlying that system of physical culture which he represents. If he have the knowledge of a physician, so much the better, altho the mere fact that he be a physician does not at all imply that he is a good physical director.

But any amount of theoretical knowledge and enthusiasm will never make a perfect teacher of physical culture. One must not only know his subject, but also be able to practically demonstrate it when required. There is hardly any educational branch, except manual training, where theory and practice are more closely allied than here. A good teacher must have done enough practical work in the different departments of gymnastics to know from his own experience how to execute the elementary movements with the greatest amount of benefit and the least danger to the body, also how to avoid certain obstacles or faulty positions. His bodily perfection and gymnastic skill should be rated as high as his mental qualifications. He must come as near as possible to our so-called type of perfect manhood, and, if possible, be a personification of the principles for which he works.

I cannot consider a person up to the average of requirements for this position who shows any marked defect or deformity, or who by carriage and movements betrays that his neuro-muscular powers have not been developed to a high degree of co-ordination and self-control.

PLACE OF PRACTICE

In most of our school systems where physical culture has been introduced we find the work carried on between the desks, in aisles, in some places in halls and corridors, and in a few instances in a gymnasium. I cannot consider any system an efficient and perfect one which is limited to mere schoolroom exercises. Such work is rather an excuse for physical education, apt to degenerate into a fad, and entirely inadequate to respond to the demand of a harmonious and all-around development.

Gymnastic activity requires freedom of motion, plenty of room, air, light, and a variety of apparatus, partly as a means of developing bodily structures and power, partly as a test for strength, skill, agility, and endurance. Limited to the schoolroom, we will never get much beyond the recreative or hygienic principle of exercise, good enough in its place when nothing better can be had, and when directed by an interested and able class teacher, but worse than nothing if conducted in a superficial, lifeless, and haphazard way, in a poorly ventilated room, with an abundance of dust and toxic exhalations from a large number of children, by a teacher who is neither trained nor qualified for such work, who perhaps considers it an imposition and despises it.

One of the most urgent requirements, then, which we must make, to which attention has been called again and again, and which must be insisted upon until it is put into effect, is that every school be provided with an adequate place for exercises, with a complete equipment of gymnastic apparatus, if possible a closed hall or gymnasium for winter and rainy days, and an open playground or athletic field for summer. That the realization of this demand is not an impossibility is proven by conditions as we find them in European countries, especially in Germany, Switzerland, and Scandinavia, where almost every school or school-district prides itself on a properly equipped gymnasium or outdoor training ground.

There is certainly as much, if not more, money available for the education of school children in the United States as in any of the nations of the world; hence the financial aspect of this question should not offer an obstacle to the solution of this problem, especially if we take into consideration what enormous sums of money could be saved to the nation every year thru its value as a hygienic and prophylactic agent, not to mention its immense educational and ethical value for building up a generation of strong, self-controlling, and noble men and women.

The number and variety of apparatus must be decided on by the teacher of gymnastics in accordance with the system taught, but there should always be enough of each to afford a large number of pupils an opportunity to practice simultaneously and thus derive the greatest benefit in the least time.

TIME OF PRACTICE

While there is not yet a uniformity of opinion among specialists and educators as to the length of time per day or week absolutely necessary for adequate physical training of pupils, we should rely on the experience and results obtained from schools where it is made a part of the regular school work. Naturally, allowance must be made for local conditions, the number of school hours, age and development of the pupils. It seems rational, tho, that wherever the demand of the school in regard to mental activity is greatest, and wherever bodily development is deficient and below the average of a certain age, there more time should be devoted to physical culture than where the reverse be the case. Taking the experience of such schools as mentioned for a guide, it may be safe to require an average time of from three to five hours per week, divided up into periods to suit local conditions, either one hour per school day or a longer period two to three times weekly. There are schools where from one-half to one hour is devoted to gymnastics daily, and others where it is given two or three times a week for one to two hours at a time, both showing excellent results.

These longer periods of gymnasium work should not do away with such exercises in the schoolroom, in daily lessons of ten to fifteen minutes each, which the regular class teacher may consider necessary for recreation and hygienic purposes. The hours for gymnasium practice should be placed either in the middle or towards the end of forenoon or afternoon sessions.

It is also necessary that the number of special teachers of physical training, especially in our larger cities, be in proportion to the number of schools and school children. There should be at least one special teacher for every large school of 1,000 pupils or more, or, if this is not possible, at least one for a small number of neighboring schools.

While such demands can easily be carried out in smaller towns, they still form a serious problem for our large cities, on account of the great number of schools and the financial obligations involved. In Chicago, for instance, with its 250 schools and 270,000 pupils, physical training is carried on under the control of eight special teachers and one general supervisor in the grammar schools, averaging about thirty schools and 30,000 pupils for a single teacher. It is obvious that under such conditions the results of physical training cannot be considered perfect and cannot meet the demands. We can point, however, to much more satisfactory results in our ten high schools, almost every one of which is provided with a well-equipped gymnasium and enjoys the exclusive service of a competent physical director.

It is also desirable that more attention be given to physical training in the education of our normal-school pupils, not only to improve their physique and make them more fit for their strenuous and enervating work as future teachers, but at the same time to enable them to teach some of the elementary forms of exercise which should be given in the schoolroom, and to look after the proper sitting, standing, walking, and carriage of the pupils.

It is the elementary teacher and principal to whom we must appeal first of all, to convince them of the value and necessity of proper physical education in our schools; for it is thru their assistance and co-operation that we can influence school boards and the public at large and convince them of the great benefit that will accrue from it to the children of the present and the men and women of the future generation.

Physical education for school children is still in a stage of infancy in our country, but much is to be hoped for in the future. Let us all strive to get a hearing before the great public, and let them see things as we see them. Let us be earnest and serious about our work, and let the results speak for us. Let it be known, first of all, that it is not our endeavor to make a physical giant out of every child, and that Sandows, Sullivans, and Roman gladiators are not our ideals, but that we owe it to the body and soul of every boy and girl of this great commonwealth that his physical powers be built up and trained to the same degree of perfection as we endeavor to develop his mental and moral capacities. Let us keep on working and agitating until physical culture is established in every school and until our demand for a harmoniously educated body and mind is realized.

DISCUSSION

EUGENE W. LYTTLE, inspector of schools, university of the state of New York, Albany, N. Y.—A small boy had just gone to bed, naughty and impenitent. His mother had lain down beside him without covering him up, without the good-night kiss, and with face turned away. There was a silence that was electric. A small hand stole out of the dark and sought the mother's face; still the silence continued. Finally came the plaintive wail, "Mamma, I've got a whole purseful of money and five dollars in the bank, but I'm a poor boy for all that." Still no reply from the mother. Again the plaintive wail, "Mamma, I tell you I am a poor boy; I have a sore finger, and my back is cold, and you don't care." Sometimes when I have seen the wealth of educational efforts that we lavish upon primary children, and also feel that we are not giving them the thing which their nature most craves, I say: "Oh! the poor boy."

It has been said here this afternoon that physical education is as important as mental training. I shall make bold to go a step farther. It is my profound conviction — a conviction that grows stronger every year — that the very first purpose and focal center of primary education should be physical rather than intellectual. I mean physical education in its broad sense, including the simpler forms of manual instruction and the development of the social nature that grows out of group activities. I believe this for three reasons. In the first place, it is thru physical exertion that the race has received its education. There is no time to amplify this thought, but anyone who has studied the progress of the human race as it has come up from barbarism thru savagery to civilization must be aware that such is the case. Again, it is almost entirely thru physical activity that the child learns until he comes of school age. We then put him in school and try to reverse nature's process. We make mental development the main purpose of school life and call it education.

Our national history should teach us the first importance of physical training. If the American people have any points of superiority over other peoples — and I think the most modest of us will agree that they have some — these points of superiority have resulted from the magnificent physical effort that our people have put forth. When we sweep over the country from east to west and see how the native forests have been redeemed, how the millions of acres of wild land have been made into large and fertile and beautiful farms, how great cities and great industries have sprung up, we need not fear to claim that this process of the redemption of the new world has been the most gigantic physical effort ever seen in the history of the world. Nor need we fear to claim that intellectual greatness has resulted from the struggle.

It has been well said this afternoon that calisthenics are but a small part of physical training. I think that it is exceedingly fortunate that the population of some of our large cities is growing so rapidly that the primary children can be accommodated only with half-a-day sessions. I hope that after a time the American public will learn that primary children can learn as much in sessions of three hours a day as they have been wont to learn in sessions of five hours. It is true that we should not, perhaps, turn the children on the streets for the other half a day. They should be taken by competent instructors into the fields, into the parks, under the blue skies, when this is possible, and there receive additional physical training.

As has been intimated by your chairman, we have been making a study of the sanitary condition of our schools in the state of New York. All of us who have ever tried to raise plants know that the first and most essential thing for the gardener is to see that the conditions for natural growth are favorable; that the soil is mellow and that the weeds are kept down. This constitutes a large part of the gardener's effort. But in the education of children it seems that we have yet to learn that the first and most essential thing is to remove unfavorable conditions. In the course of the year I visit many schools of different grades. I have kept for several years a record of the sanitary conditions found in these schools. You, in the west, where the school buildings are of more recent construction, doubtless have much more favorable conditions; but I find that of the schools I visit in New York state only 10 per cent. have any system of ventilation at all worthy to be called such; that in most of the schools where there is a system of ventilation it works very poorly.

I find also that a very large number of school boards appear to select a janitor whose sole recommendation is that he should somehow be kept from the poorhouse. Dust and bad air are the two foes which our children have to face.

In looking over the reports of our state board of health for a period of ten years I was struck with the fact that there is a steady increase in the mortality from contagious diseases during the school year. I made a chart showing the monthly mortality from measles, diphtheria, and scarlet fever. That mortality is lowest in September, rises steadily thru the year, reaching its highest point about in May; then there is a small decline in May, a somewhat greater one in June, a very rapid one in July, and in August the mortality has come nearly to its lowest point.

Fearing that the records of the state might not be absolutely right, I took the number of cases of these three diseases reported to the board of health of the city of New York for a period of six years. The charts showing the monthly morbidity for those six years coincided in their teachings with the chart prepared from the tables of our state board of health. Do these charts prove anything? Are our schoolhouses centers of contagion? We cannot, of course, absolutely affirm this, but the evidence is sufficient to make us suspicious. So far as I know, the only state that has a compulsory ventilation law is Massachusetts. I investigated the reports of the Massachusetts state board of health for ten years before their law went into effect and for ten years after. The comparison showed that the mortality from each of the three diseases before mentioned decreased 30 per cent. after the passage of the law. There was no corresponding decrease in the corresponding years in the state of New York, where climatic conditions are much the same.

One of our superintendents informed me that it was the practice in his city to fumigate the school building two or three times a year with formaldehyde ; that in case a contagious disease appeared in the school the infected room was at once fumigated ; that since this practice had gone into effect his city had not been troubled with any serious outbreaks of children's diseases.

If the parents of our children could be brought into the schoolroom and kept there for one week in the cramped and ill-fitting desks, in the foul air and in the fouler dust, there would be such a howl of indignation that it would rend the walls of our old buildings, and we should at least have clean and beautiful school homes, equipped with such furniture as would not hinder the physical development of the child.

JEAN L. GOWDY, principal Washington School, Minneapolis, Minn.—We are not assembled here this afternoon to discuss the special merits of any system of physical training. We know there is much good in all systems; none claim to be perfect, undoubtedly some are better than others, but all have the same object in view, and by their results are they known.

We do know, however, beyond a doubt, that physical training is not a fad, and that as a part of our public-school system it has come to remain. The educational world realizes its value, and it now becomes the duty of educators to present the subject in such a manner as to awaken the interest and co-operation of the world that is to be educated. To do this, educators must first understand just what constitutes a good physical education, and, second, they must seek to find the best way to present the subject.

Let us consider for a few minutes what a really good physical training should accomplish. It should promote physical strength and power of endurance. This does not mean that some part of the body should be abnormally developed; that the legs and arms should have hideous, ungainly bumps on them which God never meant to have there, and on which he must ever look with disfavor. Too much cannot be said in emphasis of the value of an even, symmetrical, healthy, harmonious development of the body, one in which all the muscles shall be brought into healthy action.

Undirected, aimless exercising will never accomplish this. Manual labor of any kind only increases the need of physical training. The woman who bends over the washtub from morning until night needs it as much as anyone we could mention. Nowhere else does muscular degeneracy show itself so plainly as in the waist muscles. The woman who bends over the washtub constantly draws these muscles together in the front and stretches them in the back. Hence they become strong and tense in the front and weak in the back. This woman needs exercises which will overcome these faults, as raising the arms overhead, stretching the front waist muscles and lifting the chest.

One is never too old and never too weary to exercise. God meant everyone to be beautiful, and we glorify him in all honest efforts to become so. We are responsible for our figures whatever our walk in life. Emerson says very truly, "a beautiful form is better than a beautiful face," and time is never wasted in the endeavor to make oneself "seventy years young instead of forty years old."

A good physical training should also promote grace and harmony of movement. This life is somewhat too short to allow simply the gaining of physical strength and power of endurance to occupy all of the time given to physical training. To learn to appear well, to give pleasure to those with whom we come in contact, cannot but claim some share of our consideration. Easy, graceful, harmonious, nerve-soothing exercises are the great need in our busy, crowded, overwrought American life. Such exercises as combine strength and force with rythmic grace and harmony must eventually be considered the best for the greatest number. In some cities and in some really great institutions of learning two systems of work are combined; one to promote physical power, and the other to counteract the angularity gained in the first. This, tho much better than having only the angular movements, seems a waste of time. What we need are exercises which successfully combine physical strength with ease and grace.

Lastly, and best of all, a good physical education should teach right thought thru right physical living, or temperance in its highest sense. Mrs. Emily M. Bishop, the well-known advocate of the Americanized Delsarte work, claims that if we hold a noble thought, a noble attitude must accompany it; and our friend Samantha Allen says: "You are not to blame for being small, Josiah, but if you would let your soul grow, mebby your body would grow some, too."

One may as truly say, "Take a correct physical attitude, and right thoughts must come;" and if right attitudes become habits, right thoughts will become habits as well. What boy can walk well, hold his head erect, look straight into your eyes while speaking, and not be noble and manly?

Much is said about putting a sound mind into a sound body. We cannot put a sound mind anywhere. The mind is God-given, and we can only train a mind as God has given it. We can, however, train a sound body for a sound mind to dwell in, and we know the help a sound body gives to the growth of a sound mind. The best thing Ella Wheeler Wilcox ever wrote is her little poem one stanza of which is this:

I may not triumph in success,
    Despite my honest labor;
I may not grasp results that bless
    The efforts of my neighbor.
But though my goal I never see,
    This thought shall ever dwell with me,
I will be worthy of it.

Tho we may not be able in all cases to train intellectually sound minds, we can train bodies which shall be fit dwelling-places for noble thoughts and aspirations.

How shall these results be best accomplished? I do not know, but let me give a few suggestions. Every good physical exercise is composed of three parts; the energizing part, the stretching, and the relaxing. During the first years of school life the child is all self-activity. He is ready for those active, forceful movements which will promote physical strength and health. During this formation period the energizing part of the exercise should hold the thought. Exercises should be given often and the time should be quick. After this period of energy comes the period of most rapid growth. Exercises at this time should be given with much slower time and the stretching should be more pronounced. Plenty of time should also be given to the relaxing part of the exercise. Never before has the child shown self-conscious awkwardness, and never again in his life will he so much need the unconscious study of harmonious movement. He is in a constant state of weariness, and he needs the gospel of relaxation. His exercises should broaden and extend his muscles and at the same time give him rest.

After a strong physical body and good physical habits are formed, we have laid the foundation for the study of grace as a study. How shall we inspire the boys with a desire to be graceful? (All girls naturally desire to become so.) By personal example first. By showing them beautiful statuary and pictures. By bringing before them graceful people. Let them see how much more a thing done gracefully may mean than one that is awkwardly done.

How shall we inspire in children, thru physical training, a desire to live aright?

By personal example first. Teach them that the body is our temple, and the mirror of the soul; that everything we do influences someone for better or for worse. "To walk badly is sinful, as it injures the physical organs. To walk badly is bad manners, for every way of walking expresses something." Bad walking expresses bad things, and is therefore immoral as well as impolite. It is not unlike vulgar slang and violent gestures. Seek to make the children feel that good physical habits are a duty.

In conclusion, let me add this thought: The physical training work must not be confined to the ten or fifteen minutes daily given to the exercises, but it must extend to all the acts of the day, for, in the words of Montaigne, "It is not a soul, not a body, we educate: it is a man. Out of this one we must not make two."

DEPARTMENT OF SCIENCE INSTRUCTION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 9, 1902

The department met in the lecture room of the chemical laboratory of the State University, and was called to order at 2:30 P. M. by President W. H. Norton.

The following was the program of the session:

Music—a vocal solo, by Mr. D. Alvin Davies.

President's address, "The Teachings of Science," by William H. Norton, professor of geology, Cornell College, Iowa.

"The Educational Value of Museums," by Oliver C. Farrington, curator of geology, Field Columbian Museum, Chicago.

"The Projection Microscope: Its Possibilities and Value in Teaching Biology," by A. H. Cole, Lake View High School, Chicago.

After discussion of the papers a committee on nominations was appointed as follows: C. W. Hall, of Minnesota, C. O. Bates, of Iowa, W. A. Fiske, of Indiana, A. G. Clement, of New York, and J. H. Kimmons of Wisconsin.

The department then adjourned.

SECOND SESSION.—FRIDAY, JULY 11

The meeting was called to order by President Norton at 2:30 P. M. The following program was followed:

Music—vocal solo, "The Erl King," *Schubert*—by Miss Grace M. Ames.

"High-School Instruction in Physics," by F. M. Gilley, High School, Chelsea, Mass.

"Physiography in the Secondary Schools," by J. A. Merrill, teacher of science, State Normal School West Superior, Wis.

"The Scientific Work of Our Government and its Influence in Secondary Education," by W. J. McGee, ethnologist in charge, Bureau of American Ethnology, Washington, D. C.

The discussion which followed was led by C. W. Hall, of Minnesota, W. H. Norton, of Iowa, and A. G. Clement, of New York.

The report of the Committee on Nominations was read and adopted, and the following officers were elected for the ensuing year:

President—C. W. Hall, Minneapolis, Minn.
Vice-President—W. A. Fiske, Richmond, Ind.
Secretary—F. M. Gilley, Chelsea, Mass.

The department then adjourned.

EDWARD H. LEHNERTS, *Secretary.*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS—THE TEACHING OF SCIENCE

PROFESSOR WILLIAM HARMON NORTON, CORNELL COLLEGE,
MOUNT VERNON, IA.

It is the custom that any words spoken by the chair at this time shall relate to the common interest only. This does not lie in any single science, either in its content or in its method of instruction. We are here as teachers of science, and it is the teaching of science in general, its scope and aim and place in the educational system, that seems to be indicated as an appropriate theme.

In suggesting a few of the functions of science teaching, I shall not attempt to arrange them in the order of their importance. In fact, the first I shall mention is that which is probably least often in our thought—the discovery and training of scientific aptitudes. In a broad sense, education is the transmission of the world's knowledge from one generation to another. This rich inheritance cannot be conveyed by libraries and museums, or in any mechanical way. It can be handed on unimpaired only by training men capable of receiving and using it. Do the Vanderbilts and the Rothschilds see to the technical education of their sons in the management of their vast railway and banking properties? How much more does it concern those whom this department represents to take all possible pains in the training of the men of science of the future, the heirs of its wealth? Somewhere in our schools today are the Rowlands and Asa Grays, the Maria Mitchells and the James Halls, of the next generation. There, too, are the thousands of the rank and file who are to do their humbler work in winning the scientific victories of the future. It was in an old log schoolhouse that the genius of Mendenhall was awakened by a good Quaker lady who had the way of setting her pupils to making simple experiments in physics. Early in the century an eminent botanist at the University of Cambridge took one of his students into so intimate a friendship that the young man was known among his fellows as "the one who walks with Professor Henslow." He had been considered a very ordinary boy indeed. His classical schooling, as he himself tells us, had omitted all habits of observation and reasoning. But Henslow discovers the marvelous scientific aptitudes of young Darwin, he secures him a place as naturalist on the ship "Beagle," and to the friendship of that teacher Darwin attributes "more influence on his career than any other." Whether in country school or in college, the teacher who discovers talent to itself, who directs it to its goal and helps it on its way, may be doing his generation a greater service than money can render, in endowments however munificent.

It may possibly be true that genius needs no discovery; that it will blaze forth from beneath any smother of adverse circumstances. Possibly Rowland would still have been Rowland even if his father had refused to listen to his pathetic cry at classical Andover, "O, take me home!" and had not removed him to the congenial environment of the Renssalaer Polytechnic. But without question the vast majority of science workers owe their efficiency to those whom we here represent. Without science instruction their scientific aptitudes would never have come to fruitage, for faculties which in childhood give every promise of large development may be so repressed in youth that they remain stunted forever. How much science should there be in our schools? Enough so that all the way from primary school to university there shall never be a single year in which the scientific aptitudes of our pupils may not be developed by the study of nature at first hand.

These boys in our classes who are to be workers in science may not be particularly brilliant; they may not shine in recitation as do those young intellects which are made with the capacity of the gelatine copying pad and can as faithfully reproduce the phrases of the text. They may ask inconvenient questions; they certainly have a high degree of individual initiative; they may be restive under routine. But in the field and laboratory we shall discover in them a marked ability to see, to co-ordinate, and to interpret.

Let me suggest that we enter sympathetically into whatever scientific interests of these boys may at the time be strongest. If they are in the "collecting stage," we may gently divert them from postage stamps to flowers, fossils, or butterflies; we may see that their collections are studied with something of the care that Oswald Heer gave his plants, Darwin his beetles, and that made the cabinet of young Spencer Baird the nucleus of the collections of the Smithsonian Institution. If we find in our boys a greater liking for their furry, finned, and feathered friends alive and at home than dead and on the dissecting table, let us see that the laboratory does not repress this normal turning of the young naturalist to out-of-door study.

I do not mean to imply that the cadets of science need instruction of a sort different from that of their fellows. The teaching which best brings out scientific aptitudes is precisely that which every student should have; it is that which performs the second function I shall mention of science teaching; it brings in touch with nature. Science teaching is objective; its impressions are at first hand; it brings face to face with facts. How weak and vague, how illusory and fleeting, is the impression of the word compared with that of the thing! It is our peculiar privilege to teach things, not words. In this presence I need not attempt to slay again the slain and say aught against the bookish teaching of science. After all, it is perhaps as worth while as the bookish teaching of anything else. I do not know why fourteen weeks in physics or geology is not as good as fourteen weeks in Grecian history or political economy. But the text-book teaching of science is so markedly inferior to the laboratory method that it is fast disappearing from our schools. In chemistry, physics, and biology it has well-nigh gone. But in the earth sciences the new and fruitful methods of study in the laboratory and field are by no means common. How many well-equipped physiographic laboratories can any of us count in his own state in colleges, normal schools, and universities, to say nothing of high schools? And in how many public schools are such fundamental notions as the weathering of rocks and the work of streams still taught from the printed page instead of in the field? Last fall I asked the students in my different courses in geology in Cornell College how many of them when in high school or academy had ever taken an excursion in geography or physiography. And there were but four out of 120 students who had ever been taught anything in these two subjects outside the schoolroom. The enthusiastic visitor at a great museum who was so anxious to handle the feldspars in one of the cases, because she had been teaching feldspar to her pupils for fourteen years and had never before seen the mineral to know it, belongs, I fear, to a type not yet extinct. No matter what or how much we omit from the text-book, let us teach first and foremost, as critically and as fully as possible, whatever can be seen and handled, drawn and described, and verified by experiment. We may leave to others to teach how to con the printed page and to assimilate and reproduce its ideas. It rests with us to train the quick eye and the skillful hand, to teach the patient investigation of nature. I once asked Dr. Alexander Winchell if he found his seniors in geology at the University of Michigan good observers. Yes, he answered, unless they have had too much Latin and Greek. Apart from science studies, a college course may easily dim the eye and leave one a duller student of things than when he entered. If science is rightly taught in our schools no one need ever say, as the distinguished president of an American university recently confessed: "The best teacher I ever had was the kindly old neighborhood loafer, who roamed the woods with me and told me the times of the wild flowers and the habits of the birds."

It is because scientific culture is objective that it has an ethical value wholly different from that of any culture largely subjective, such as literature, art, or philosophy. Edward Everett Hale has told of the good he got when a boy from setting type in his father's office: "The absolute accuracy which is necessary is good for a boy. The solid fact that 144 ems will go in a given space and will require that space, and that no prayers nor tears nor hopes nor fears will change that solid fact — this is most important." Here we touch the special note of science training. It teaches limits and bounds, the bounds of the solid fact. In literary culture the spirit projects itself into the world. It fuses, I might almost say, external reality by the breath of phantasy and reforms it according to its own free creative power. But science faces the spirit with adamantine walls, the unchangeable *moenia mundi*. Its god is the god of things as they are, not of things as we might imagine them to be. Its work is patiently to investigate, and humbly to obey. Science, therefore, teaches fairness, emancipation from prejudice and personal bias, and a supreme love of the truth. Its word is not freedom, but law. Everywhere it teaches law and the inescapable consequences of its breaking.

Despite the rapid upward curve of the scope and effectiveness of science instruction, its work is still far from done. The scientific culture of the age is but skin deep. Scratch it anywhere and one comes upon the strange delusions of the primitive savage. We are all acquainted with estimable people, cultured and lovely women, graduates of our high schools and colleges (tho seldom, I believe, in scientific courses), who have come under the spell of the recrudescence of an ancient illusion. They have been "set free." To them there are no solid facts. "Do not teach physiology in the schools, for the dear children really do not have any bodies," was the pith of their petition to the school board in one of the largest cities in Iowa. It is their faith that they can change at will this old world of ours and annihilate all its hardship and pain and disease. I know of nothing which will render immune to such vagaries except a continuous treatment of physical science administered in large doses. Let me emphasize the fact that science is in touch with external reality; it teaches the veracity of the world, and its discipline is therefore preeminently serious, healthful, and sane.

All this is related more or less closely with the last function of science teaching I shall take time to mention—the discipline of the reason. Language, with its vocabularies and paradigms, literature, with its imaginative interpretations, with its supreme sense of beauty and of form, rather than of substance and of truth, indispensable as both studies are in a liberal education, cannot develop the rational faculties. For this we must ever depend on the strenuous athletics of mathematics and of science. What geometry is as an educational instrument in deduction, that the inductive sciences may be made in training the reason to deal with the concrete facts of daily life. These sciences demand as a daily exercise comparison, judgment, reasoning from cause to effect and from effect to cause, the sifting of evidence, the testing of hypotheses, the calculus of probabilities. If the teachers of science in America can teach the scientific method to the rising generation, we need ask no other opportunity to join in the long war against credulity and superstition, for we shall have helped to accomplish perhaps the chief mission of science in the world — the rationalization of the social mind.

It was once said by Robert Louis Stevenson, that consummate artist in words: "No one knows better than I that as we go on in life we must part with prettiness and the graces." The time has come when in education prettiness and the graces ought at least to be made subordinate. Secondary and higher education may be likened to the two pillars of Solomon's porch. Wrought of solid metal, and crowned with chapiters of carven pomegranates and lily work, they were fitly named *Jachin, He shall establish*, and *Boaz, In it is strength*. However rich may be the decorations of the education of the future, I believe it will be established in the strength of science, using the word in the widest sense. If the understanding is more than imagination, if truth is more than beauty, science must needs be the central supporting column of all education after the reason has come in its development to surpass the faculties of earlier ripening.

The core of science in American culture will save it from any decadence. There have been, there are, decadent cultures, as there are decadent nations. Let me cite the chief historic examples:

1. The culture of the rhetoricians of Greece, a culture which concerned itself wholly with words and the art of public speech, and which at last made the very name of its professors, the sophists, a byword to all generations.

2. The culture of the last century of the Roman empire, a culture which was devoted to the study and imitation of models of literature even then ancient, and which was therefore smitten with barrenness even in the field of letters.

3. The culture of the English universities at a time comparatively recent, "caravansaries of idlesse" in the phrase of one of their distinguished graduates, where the flame of thought was fed with the ashes of ancient studies from which the vital interest had long since been burned out.

4. The culture of the universities of India today, a culture which the London *Spectator* has recently called rotten, which teaches the Bengali the masterpieces of English as the Roman was taught the masterpieces of Greek, and "indifferent as it is to science and the constructive arts, is ultimately to fail, and probably with a crash."

5. And last, the culture of China, a culture classical in the veneration of the ancient models of its literature, and exquisite in the cultivation of the amenities of speech, a culture which has lately excluded science from the empire by imperial edict, and which, more than any other internal cause, is bringing to pass the dissolution of that venerable nation.

The strain of weakness in all these decadent cultures is clear. They make no provision for the education of the rational faculty of man thru the study of his environment. But we need apprehend no similar fate for education in America. It is woven of too many strands. A culture which teaches literature, the highest expression of the thought of the world, and history, the story of the social evolution of man, and science, the knowledge of the laws of nature, of self, and of society—such a culture cannot become decadent; it cannot die except with the death of civilization itself.

THE EDUCATIONAL VALUE OF MUSEUMS

OLIVER CUMMINGS FARRINGTON, CURATOR OF GEOLOGY, FIELD COLUMBIAN MUSEUM, CHICAGO, ILL.

The word in this title which I would emphasize is "museums." Neither laboratories, collections, nor field work are just now to engage our attention, but museums—institutions founded for the preservation and exhibition of objects of science and art. We shall probably agree for this occasion, since this is the Science section of the Association, to confine our discussion to museums of science. I am confident, however, that any principles which we may discover regarding the possibility of education to be obtained from museums of science will apply equally well to museums of art. Tho the two cultivate different fields, they are embodiments of the same idea and have similar aims.

Regarding the general principles underlying the purpose of museums which gives them their chief importance as an educational factor, it will doubtless be generally admitted that museums stand for the study of things, in contrast to the study of words, or even of pictures of things. It was natural, perhaps, in the development of the race, that as man came to realize the power of words, their beauty and their value as means of communication, it should seem to him that the possibilities of progress lay chiefly along the line of their study, and that he should hitch his educational wagon to that star, forgetting that others might be as lofty and as brilliant. To a greater or less extent he also realized the advantages of using pictures of things to help the understanding and the intellect, but it is only within a comparatively short time that he has begun to see that to deal with the things themselves is still better. Things cannot lie; words about them may. Our neighbor's idea as communicated to us in words may be, and probably will be, helpful, but our neighbor is not infallible, and the only way for the individual to get individual truth is for him to deal with the things themselves.

To this study of things museums of science are one of the most recent contributions. Just when to date their birth it would be difficult to say. Probably for a number of centuries past housed collections worthy to some extent of the name of museums might be discovered here and there, altho these were in almost every case private rather than public institutions. But the inception of the museum of science as we know or conceive it is only a recent matter. We may agree with the late Secretary

Goode of the National Museum in fixing it no farther back than the London Exposition of 1851, where for the first time, as another has said, were realized the advantages of "gathering together within the limits of a day's walk objects which could otherwise be seen only by years of travel."

All the important scientific museums of our country are certainly subsequent to this date. The organization of museums in this country can be grouped about three periods, two of them following expositions. The first period was about 1860, and saw the erection of the Museum of the Boston Society of Natural History and the Harvard Museum of Comparative Zoölogy. The second was about 1876, and from it date the American Museum of Natural History of New York, the Peabody Museum of Yale University, the Museum of the Philadelphia Academy of Sciences, and the inception of the United States National Museum, altho the building which it now occupies was not completed till 1881. The third period followed the World's Columbian Exposition of 1893, and to it belong the founding of the Field Columbian Museum in 1894, the Carnegie Museum in 1895, the Philadelphia Commercial and Golden Gate Museums in the same year, the Milwaukee Museum in 1898, the Denver Museum, just building, and numerous university museums.

In Europe the British Museum, in many respects the world's greatest museum at the present time, was not a vigorous institution until 1845, and the natural history department was not made a separate division until 1880. The great Austrian Museum of Natural History began in 1748 to occupy a corner in the National Library building, but it was not until 1876 that its present magnificent plan and building took shape. The Museum of Natural History of Paris in the Garden of Plants was founded in 1795, but only within the last five years it has undergone improvements so radical in their character that the old museum seems in contrast hardly to have been worthy of the name.

Is it any wonder, then, since these institutions are of so recent origin, that as educational appliances we have not yet learned by what handle to grasp them, and that they are in general approached with a feeling not far removed from bewilderment? There could be no better proof of this bewilderment than to notice, as anyone may if they will, the purely casual way in which most museum visiting is done. A vase here first catches the visitor's attention, then a mummy there, a moose here, a goose there, and so the spectator flits, butterfly like, from room to room, until the sum of the impressions he receives does not differ much in kind, if indeed it does in quantity, from that which he would gain by looking into a kaleidoscope. I cast no aspersions upon those who visit museums in this way. Often recreation is the only object sought, and if change is the secret of recreation, then such visiting furnishes it in an eminent degree. But such a practice can hardly be regarded as in accord with the highest ideals of education, for, while it is true that a higher value than formerly is now placed upon education unconsciously imbibed, it is also true that the education which counts still comes largely as the result of study and application. This study may, of course, be to a certain extent unconscious, and need not be distasteful or laborious, thanks to modern pedagogical methods; but it must still be study.

The way to get education out of a museum, then, is to study it, and my aim will be simply to give a few practical hints as to the character of this study and how it may best be conducted.

My first point would be to say that museum study should be definite. The verdict of all teachers with whom I have talked as to the best means of securing valuable results from museum study is that some particular work, some special topic, should be assigned for each occasion, and that all effort for that occasion should be confined to that work and topic. A wise teacher would not tell his pupils to turn over the leaves of a textbook of chemistry for an hour or two and then expect them to know all about chemistry, or even anything about chemistry. How much more benefit is likely to be derived from a two hours' general visit to a museum?

If, then, museum study is to be definite, what are some of the definite things that can be done? Let me suggest several, some of which I know have been tried, and with success.

For pupils of the lower grades, much use can be made of objects in museums for purposes of illustrating nature study. One Chicago school of the fourth grade of which I know conducts an exercise in nature study like this: The pupils are first taken to Stony Island, an old quarry in the city where fossils may be collected, and there gather and see in place a number of different kinds of fossils. Then they go to the museum and compare the fossils there with what they have found. They see their relations to the larger groups, and study a collection illustrating how fossils are formed. The reports of their studies are then submitted in the form of an essay on fossil making. The Whitechapel Museum of England seeks to aid use of its collections by inviting teachers to send in lists of their object lessons for time to time. The objects to be found in the museum illustrative of these lessons are pointed out to the teachers and they subsequently come with their pupils to see and study them.

The study of geography finds almost endless illustration in the natural history museum. The products of different countries, animal, vegetable, mineral, can be sought out and reported upon, so as to make more lasting impressions on the mind than if learned from books. Relief maps, which most museums provide in greater quantity than schools can do, give far more accurate ideas of geography than the ordinary maps. Observation of such maps will help the pupils to realize the why of geography; why the Sahara and the American deserts exist; why the old world produced five races, the new world but one; why the peoples of India, China, and Egypt are stationary and unprogressive; and so on.

Similarly the study of history can be given greatly increased interest and vividness by illustrating its events by reference to museums. How much more fully and accurately can the Indians of our country and the conflicts of the white races with them be understood by a child who has seen representations of their culture and mode of living in a natural-history museum than could be the case were his ideas drawn from the average history or from Cooper's novels!

In science work in the higher grades much important work can be done in museums. Classes in botany, both systematic and economic, may find in any good botanical collection numerous opportunities for study. Such materials as woods or fibers, and collections illustrating varieties and uses of cotton, corn, coffee, etc., admit of various application to purposes of instruction, even if herbarium studies must be excluded on account of the fragile nature of the materials.

Classes in zoölogy may study collections such as those of shells, birds, or mammals, with a view to making classifications devised by each pupil which can be compared with those generally adopted. Again, profitable study may be made of collections, such as one of vertebrate skeletons, by assigning the analysis of different bones or limbs to different members of a class. To one, for example, the cervical vertebræ may be allotted, to another the fore limb, or single bones of it, to another the hind limb, and so on. The pupils are asked to trace these bones thru the different animals and note their variations in form, size, and use. The reports of these observations are then read in the class the next day and discussed. In the Englewood High School of Chicago, mimeographed copies of an outline of study like this or others which are to be made at the museum are given, and the pupils are sent to the museum with these with instruction to make a written report at a certain imminent date. In such ways studies of variation, of adaptation, of mimicry, and of similar subjects may be made on any large collection of mollusks, birds, insects, or other animals.

In some museums, chiefly in Great Britain, regular courses of instruction in science are given in the museums by members of the museum staff. The plan seems to have been tried in this country, so far as I know, only in the Boston Museum of Natural History, and reports do not indicate that such courses are very largely patronized. The school board of Milwaukee has, however, employed for the last three years a museum lecturer, who spends his time at the Public Museum in giving talks to the public-school children on objects of nature study there found. Pupils of all grades above the fifth attend these lectures as part of their school work. The chief difficulties attending talks in a museum at the cases, or what are called in England "museum demonstrations," are the small number who can see and hear to advantage and the fatigue consequent upon standing for any length of time. To obviate these difficulties in some museums the objects desired for use in instruction are taken to an audience hall and there exhibited as they would be in a class-room. There is some danger, however, of loss or breakage of valuable specimens by this method, and I have not found as much interest aroused when specimens are viewed in this way. Stereopticon lectures in which photographs of the specimens are exhibited answer much the same purpose, and often are to be preferred. General courses of lectures illustrated by the stereopticon now form a prominent feature of the work of nearly all museums, and their educational value is without question great.

Another way in which some museums have endeavored to aid school work is to offer prize-essay contests. Such contests have been offered in this country by the Field Columbian and Carnegie Museums, and in Scotland by the Perth Museum. The results have been most satisfactory and indicate that museums may thus distinctly aid our educational system.

Even without the stimulus of prizes, museum visits may be made to afford excellent sources of essays, written as school work in English or in English and science combined.

We thus see some of the ways in which definite museum study can be carried on. The variations of methods possible are of course endless, and dependent upon the nature of the museum and the collections in it. It is trusted, however, that from these hints the fertile-minded teacher may be able to make applications suited to his or her particular field.

My second suggestion would be to say that museum study should be diligent; and the diligence of the teacher should precede that of the pupils. A teacher would probably not think of teaching any subject in the class-room without having previously become to some slight degree acquainted with it, but museum study appears to be sometimes thought an exception to this rule. No, museum study, like all other kinds of study, requires work, work on the part of the teacher and work on the part of the pupils, in order to obtain the best results.

Given the wide-awake, earnest teacher and I have no fears that the pupils will fail in diligence. It has become a common thing at the Field Columbian Museum to see the pupils of certain teachers spending their time after school hours for weeks in succession earnestly studying some subject assigned by these teachers. The work interested them, they enjoyed it, and their diligent pursuance of it followed as the day the sun.

In the third place, museum study should be delightful. What! I hear it said: Can study of those long rows of specimens having meaningless Latin names ever be made delightful? Is there any draught of pleasure to be quaffed among the dry bones of museums? If they would contain collections of axes with which murderers have killed their victims, or of ropes with which they were hanged, or there were specimens of bicephalic calves, anastomosed trees, or cyclone-twisted lamp-posts to be seen, then the prospect of visiting a museum might be looked forward to with pleasure.

Unfortunately to those who desire recreation of this sort it is to be said that nature is to be known by her fruits, not by her freaks, and that society has too frequently painful illustrations of the fact that the exciting of morbid curiosity is neither safe nor wise to encourage effort along this line. To arouse a healthy curiosity, however, and then provide means to satisfy it, is to my mind one of the noblest duties an educational institution can perform, and few are better fitted to do this than museums. "Knowledge begins in wonder," and the boy who goes to the museum because he believes it to be a "stuffed circus" may stay because he finds it to have a subtle stimulus. To attain this end it is certainly desirable that museum representation should be made as attractive as possible, and the observer of the times will, I think, find that the present trend of museum development is notably in this direction. Groups and group collections are, wherever possible, being made to replace tiresome and lengthy systematic series. The design and fittings of halls and cases are being made of the richest and most pleasing order possible. No material is thought too costly or precious to serve as settings for even humble specimens. Mahogany and velvet, plate glass and burnished brass, are felt to represent true museum economy and to furnish the only kind of equipment which ought to be considered permanent. And surely, with Ruskin, we believe that "out of the millions spent to give attractiveness to folly we can spare one to show the honor in which we hold instruction."

Of the fact that museum study is found to be attractive there need be no better proof than that seen in the constantly increasing attendance on these institutions by teachers and scholars. I cannot give many figures to show this increase, for few museums have thus far kept record of such attendance, but I feel sure it is a fact. At the American Museum of Natural History the attendance of teachers and pupils for the purpose of systematic study of the collections was, in 1899, subsequent to May 20, 2,928; in 1900, 5,302; and in 1901, 5,320. The similar attendance at the Field Columbian Museum was, in 1895, 9,118; in 1896, 5,228; in 1897, 8,753; in 1898, 6,585; in 1899, 9,131; in 1900, 8,871; and in 1901, 9,640.

The latter record I regard on the whole as showing a marked increase, since 1895 was the opening year of the museum and the attendance was largely to see what the museum was like. I am confident that if a measure of the real instruction and the value of the instruction received from the museum in this time could be taken this would show a still greater increase. A rather significant result of museum visits which one large Chicago institution reports is that the number of books of fiction which the pupils draw from the library has notably decreased and those on natural history increased. Increase in seriousness and earnestness of study is a result reported by nearly all teachers. The museum impresses the child with the reality of things and the extent of the world about him of which he has as yet learned little, as books cannot.

Perhaps some to whom I am speaking willingly admit the value of museums as aids to education, and would gladly make use of them if any were accessible, but such is not the case. In answer to such I would paraphrase an old adage and say: "Either find a museum or make one." It is not simply collections of rare objects from remote corners of the globe that are required to constitute a museum; it is collections of any objects intelligently gathered, grouped, and exhibited. There is not an inhabited area ten miles square anywhere in our country of which the fauna, flora, physical features, and industries are not now undergoing changes such as will make an accurate record of them, in the shape of carefully preserved specimens, of inestimable value fifty years from now. Moreover, such collections can, during the passage of the fifty years, be constant sources of instruction as well. Efforts to form such collections must be intelligently made. Spasms of enthusiasm interspersed by long intervals of dust and decay will not bring about the desired results. Such achievements are more likely to prove horrible warnings to the coming generation. What is done must be done well and with an eye to the future. A few well-lighted, well-arranged, well-labeled specimens constantly cared for are worth acres of "clutter" and rubbish, for the care of which no one in particular feels responsible. This is not the time or place to elaborate plans for projects of this sort, but I feel sure that the desirability and importance of establishing museums in all good-sized communities is coming to be appreciated, and that it is as certain that patrons of museums will arise at no distant day as it is that patrons of libraries are even now distributing beneficent influences. "Silent reformers," museums have been called by an eminent political economist, and such they are. Both as such reformers and as means for becoming acquainted with those forces of nature whose possibilities we are just beginning to understand, museums have pre-eminent value, for they have power to preserve what is good of the past and to point to what shall be good in the future.

THE PROJECTION MICROSCOPE—ITS POSSIBILITIES AND VALUE IN TEACHING BIOLOGY

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We are dealing with terms needing definition, in order that we may be sure of occupying common ground. Biology, as used in this paper, includes the study of the vital phenomena of live plants and animals, as well as the details of their external morphology, anatomy, and histology.

Projection microscopes include all types of apparatus by which pictures of actual objects may be exhibited by transmitted light and under various degrees of magnification on a suitable screen. Transparent, translucent, or opaque animals and plants, or their parts, may be substituted for the picture on glass, i.e., the lantern slide, regularly used in stereopticons, and the stereopticon then becomes, in effect, a low power projection microscope. For medium and high power magnification microscope objectives are necessary, and these require a projection microscope attachment, or an ordinary microscope carefully adjusted so that its optical axis coincides with the optical axis of the system of condensing lenses.

True teaching, in biology, must attend, first of all, to the training of the student in the habit of accurate perception of objects and in the formation of correct mental images; for these lie at the very foundation both of an understanding of the phenomena, relations, and structure of organisms and of the intellectual development which results from such an exercise of the student's perceptive and reflective faculties. Whatever information the teacher is called upon to impart should be supplemental to the student's own acquisitions and tend toward directing his energies and broadening his view, never merely cramming his memory.

Three types of mind are likely to be found in any large class: First, there are the minds which are suffering from an acute attack of mental resistance and active protest against study; second, the passive victims, as it seems to them, of a necessary but useless school routine (they are intellectual putty, more or less workable); and, third, the wide-awake young investigator who has caught the spirit of the age but capers over the field of scientific thought without definite purpose or results. How to catch the eye and attention, stimulate intellectual activity, and wisely direct it in all classes of minds is the teacher's problem. Permit me to record the conviction that in the realm of biology there are the natural conditions which ought to lead to a very large, if not the largest, measure of success in conquering resistant and arousing passive minds and directing frisky pupils into definite and effective lines of work.

It is a matter of common observation that any one method will not reach all cases. Experience for a score of years with students of various grades, ranging from first year in high school to post-graduates in college, is the basis on which is founded my growing belief in the wide usefulness of projection microscopes as aids in teaching biology. Time will not permit me to enter into the details of manipulation by which the results are attained, nor is it necessary, as these details are now in course of publication.[1]

The most important data in reference to the possibilities of the projection microscope may be summed up in the answers to a half dozen practical questions:

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[1] *Journal of Applied Microscopy and Laboratory Methods.*

1. What are the minimum and maximum sizes of objects which may be shown in one picture on the screen?

If the projection outfit includes a good selection of lenses, microscopic organisms, such as motile bacteria (e.g., *Spirillum volutans*), live amœbæ and infusoria are examples of the minimum sizes, while objects about four inches in greatest diameter, such as live fish, large leeches, entire plants of moss, portions of the axis of chara, and similar objects mark the maximum for the ordinary projection objectives.

2. In what conditions may the objects be in order that they may be projected successfully?

Live animals and plants of aquatic species, and others which may be mounted in water, are of the highest value in exhibiting life phenemona, and are of great interest. Until one has gone to the ponds with a dip-net, or even with a pole, hook, and wide-mouthed bottle, and has taken up a mass of weeds and placed them in the bottle of water, he will not know what a host of interesting organisms are available for this work in almost every locality. Many of these types are easily kept alive thru the entire winter in battery jars, or other simple balanced aquaria. For projection, they are mounted in water in glass cells of various forms and sizes. If the animals are normally too active for careful study, e.g., mosquito larvæ, daphnia, gammarus, and tadpoles, they may be partially or completely anesthetized. The anesthetic best adapted to all types of animals is chloretone. Detailed formulæ for the use of this comparitively new hypnotic are now awaiting publication and will cover a wide range of types from amœba to frogs. All sorts of prepared specimens of animals and plants, either in natural colors or stained, and practically all microscopic objects are suitable for projection.

3. What is the possible range of magnification of the pictures of objects as they appear upon the screen?

While the answer in any specific case depends upon the intensity of the light, distance from the projection microscope to the screen, the mode of mounting, and the nature of the object, it may be answered, in general, that a good series of lenses will give various powers from a minimum of ten diameters or less up to ten thousand diameters, which is the highest for which there is any practical use, but not the highest obtainable. Lest it may seem that these high powers are guessed at, it ought to be stated that they are the recorded results of careful measurements. The power to be used on any particular specimen is determined according to the general rule for the use of all magnifying lenses, viz., use the lowest power which affords a satisfactory picture of the details to be studied.

4. What lenses are used for magnifying the live or dead organisms or sections of them?

For pictures of larger objects, in which gross morphology or motions are to be shown, e.g., swimming fish or tadpoles, crawling leech, beating of the heart of a large fresh-water clam and similar objects, regular achromatic stereopticon objectives are used, the object itself, properly mounted in a glass cell, taking the place of the usual lantern slide. Quarter-size objectives of this kind will also show the circulation of blood in the tail of a fish or tadpole, if the light is good and the screen is from twenty-five to thirty feet distant from the object. It thus becomes evident that the range of usefulness of the ordinary school or college stereopticon may be greatly increased by the addition of a few glass cells to the outfit. For medium powers, good quality regular achromatic microscopic objectives of powers from the lowest to about three-fourths inch are used. For high power work, use one-half, one-quarter, and one-eighth inch objectives. For the highest magnification, use one-twelfth inch oil-immersion objectives. If the objectives used on your regular microscopes do not give satisfactory pictures on the screen, special projection objectives may be purchased.

5. What is the distance from the projection microscope to the screen?

The projecting distance may be varied to suit the conditions between the limits of five and fifty feet. A good distance, when using solar or electric arc light, is twenty-five feet. With oxyhydrogen light and one-twelfth inch oil-immersion objective, the distance must be reduced to ten feet or less. The three sources of light just named are the only ones which give light of sufficient intensity for use with microscopic objectives. Sunlight works up to a maximum of more than ten thousand diameters; electric arc light, with a properly adjusted system of condensers, has been used by my classes up to eight thousand diameters, and a special oxyhydrogen projection microscope fitted up for an eastern college gave, with a twelfth-inch oil-immersion objective, brilliant pictures up to fifteen hundred or two thousand diameters.

6. What plants and animals and their parts, and what vital and chemical phenomena pertaining to them, may be successfully demonstrated with projection microscopes?

If this question were answered by giving an enumeration of the screen work done by my classes each year in connection with their work with regular microscopes, you would be wearied before the end was reached, and yet this would be but the beginning of what is possible and is being done, to some extent, by an increasingly large number of workers in this line. The question is best answered, therefore, by a statement of the classes of objects, with a few examples.

First, practically all permanent microscopic preparations used in ordinary microscopic work. These include small animals and plants, and sections of larger species, either stained or in natural colors. Second, hundreds of species of microscopic and small, live animals and plants, which are easily mounted in water, for exhibition of their forms and much of their structure. An anæsthetized small, live earthworm will show the following details of structure, viz.: body-wall and cavity, septa, dorsal, and ventral blood vessels, setæ, œsophagus, crop, gizzard, stomach-intestine, and the glandular portions of the nephridia. In crayfish about two to five days out of the egg even the nerve ganglia and commisures in the abdomen may be demonstrated. Third, the movements, changes of form, and many of the vital phenomena of live plants and animals may be clearly shown, some of them much better than by any other method. Under the stimulus of solar and electric lights, green plants, e. g., anacharis, carry on the regular life processes, manufacture starch, and throw off oxygen. The effect of cold is easily demonstrated by the addition of a little ice water to the water in which the plant is mounted, and the rapidity of evolution is instantly reduced, or, if ice is added, the bubbles of oxygen cease to appear. Starch grains may be tested in green plant cells, or in slices of potato, and boiled enough to cause them to swell and become translucent. Cooked starch may be tested with iodine, and then another portion of the same starch which has been treated with saliva may be similarly tested to demonstrate the chemical change, or digestive action, of the ptyalin of the saliva. Other phenomena include modes of motion, as in amœba, infusoria, planarian worms, leeches, gammarus, and fish; feeding, as in fish, and various aquatic insects and larvæ; action of vital organs, e. g., the beating of the hearts in earthworms, daphnia, fresh-water clams, and the movement of the valves of the heart in the nymph of the dragon-fly; peristaltic action of the intestine and the grinding of food in the gizzard of earthworms; circulation of blood in tails of fish and tadpoles, foot of frog, and antennæ of crayfish. An interesting series of plant motions is seen in diatoms, volvox, oscillaria, the movements of elaters on spores of equisetum, and circulation of protoplasm in cells of chara and tradescantia.

We now turn to the consideration of the value of the projection microscope as an aid in teaching biology.

If the demonstrated possibilities of this class of apparatus, as above set forth, give promise of educational value, the actual use of the instrument gives results most satisfactory to students and teachers, both while the work is being done and in the riper judgment of the student's later years. The educational value of projected pictures cannot be developed, if they are simply made the basis of a more or less valuable lecture. Such pictures, in the class-room, may be—in true teaching must be—definite links in the chain by which the teacher educates, or draws out the intellecual powers of his scholars. This follows from the fact that the pictures are connecting links between practically indentical and synchronous retinal images in teacher and student, and afford definite common bases for question and answer as well as for lecture demonstration. The principal results of tests of the value of projection work in teaching biology to a large number of classes of high-school and college grades may be summed up in seven statements:

1. Projected pictures awaken and increase the student's interest.

The motions of live animals and plants, as they appear upon the screen, appeal directly and successfully to his innate love for things in motion. The odd forms and varied motions of different species hold the attention and interest until a desire for more knowledge makes itself felt as a new or accelerated force in the scholar's life. Compare the ordinary diagramatic chart, or even accurate pictorial representations of a fresh-water hydra, with the expanding, contracting, and twisting monster which is seen as a living chart on the screen. If a mature bud is about ready to separate, or if water-fleas have been mounted with a hungry hydra, interest runs up to "ninety degrees in the shade." If the odd pranks of some live animals send a ripple of laughter over class and teacher for a moment, it acts as a wholesome condiment flavoring the heavier intellectual meat, and improving intellectual digestion and appetite. Ordinary microscopic preparations are full of interest, and serial sections, e. g., embryo chicks, kindle enthusiasm.

2. It supplements regular work with microscopes, and, where students are so unfortunate as to be denied the privilege of using a compound microscope, projected pictures are the best substitute. As a student works with his microscope, and is encouraged by the teacher to be self-reliant and develop original power, there will be points on which his views are not full or accurate. With the type specimens projected on the screen, all the ragged ends of observation by all the class may be quickly and successfully gathered up. Individual work with the compound microscope trains the student's hands and judgment, and is always to be preferred as a sound foundation, but its true supplement and best substitute is the projection microscope.

3. It saves time in teaching the technique of the compound microscope.

Did you ever find earnest beginners with the compound microscope wasting precious time and losing enthusiasm over objects in unlighted or half-lighted fields, or watching air-bubbles, dirt, and other foreign matter in their preparations? A brief demonstration of these on the screen, interesting because entirely new in the student's experience, clears up the light, air-bubble, dirt, poor-focus and no-focus difficulties.

4. Each student is given the benefit of the best specimens.

The laws of growth and variation of organisms, together with the varying skill of students, result in a wide difference in the quality of the preparations on which their observations are made. After each one has done his best, he needs the benefit of a brief view of the best that has been done. It may be remarked, in passing, that the exhibition of the best preparations made by the members of the class is considered an honor worth working for. Fifty or more students may successfully study a preparation in the same amount of time that is ordinarily consumed by one in the usual method.

5. Students prefer to draw from objects projected on the screen. The exercise is made all the more valuable educationally from the combination of best object, better supervision by the teacher, and the inability of careless pupils to excuse their errors on the ground that their specimens were like their drawings. When using solar or electric arc lights, one or more window shades may be raised enough to furnish ample light on the drawing paper without destroying the details of the picture on the screen.

6. It contributes to a broader knowledge of types.

Too often it is true that students who have made a formal and excellent series of notes and drawings on some type animal, e. g., the earthworm, are left in almost complete ignorance of related genera and classes. Lack of time and the expense of many duplicate specimens are insurmountable obstacles. Lecture demonstations, including a considerable amount of quiz work, in which all the principal relationships to the type form are studied out by the class, are at once beneficial and pleasant exercises, broadening knowledge, training the observational faculty and judgment, and fixing mental pictures of the objects themselves, not merely their names.

7. The use of projection microscopes increases definiteness.

A characteristic of untrained minds is indefiniteness, which manifests itself in failure to understand or use words accurately, or to do the simplest things according to directions. Talking to the student will never cure this mental blight. They must be trained by having definite standards set before them, followed by insistence on definite work, until it becomes a habit and its value is appreciated by the student himself. The excessive variation in the focusing power of the eyes of different persons is an important factor in the general indefiniteness which is characteristic of the earlier weeks, at least, of work with compound microscopes. The projected picture is either a surface view or an optical section at some definite depth in the object. By seating pupils with defective vision near the screen, it is possible to give every member of a large class practically the same retinal image which the teacher has, and with pointer in hand he may fix attention on any part of it while lecturing, demonstrating, and quizzing. The value of thus centering the eye and mind on definite objects during more or less prolonged study cannot be overestimated. The success which gives a student greater courage for harder tasks, and prepares his mind to deal with the practical problems of after life, is built upon this corner-stone.

[The speaker then gave a demonstration of microscopic projection, using the electric arc light, with one-inch, three-quarter inch, and one-twelfth inch oil-immersion objectives. The typical subjects chosen for exhibition were animal motions and anatomy, shown in

living infusoria, daphnia, and gammarus; histology, in a stained hydra, and the nuclei of the red corpucles of frog's blood; vital phenomena, in the pulsation of the "hearts" and dorsal vessel of a live anesthetized earthworm and in the beating heart of daphnia; and chemical and physical phenomena, shown by testing starch with iodine and then boiling the starch to exhibit the swelling of the grains and their change to a translucent condition.]

HIGH-SCHOOL INSTRUCTION IN PHYSICS

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Of the three ways of presenting the subject of physics, by the recitation or text-book, the laboratory, and lecture methods, the latter, tho perhaps the oldest, is not now utilized to its full extent. It has been more or less modeled on the practice of the colleges and technical schools. By lectures suitable for high-school classes should not be understood a formal discourse, but rather an informal talk, interrupted from time to time by questions and suggestions by the class. The teacher should assure himself, by questioning, that the descriptions and experiments have been understood. It may be well to repeat, of course rapidly, some important and fundamental experiments four or five times, the purpose being to fix a scientific fact by seeing the experiment repeated, instead of seeing the experiment once, and afterwards studying and committing to memory the record and description of that experiment. At intervals, the reading of notes just taken by the pupil should be called for and the more common errors in note taking corrected without the laborious use of the blue pencil. Coaching in athletics and teaching in manual training are done on the spot, as it were, and are more effective than written or verbal criticisms that come to the pupils hours too late. It is not to be expected that young children will know how to take notes at the beginning of the study of science. In fact, one of the peculiar advantages of science study (and this is especially the case in physics), is the invaluable training in note taking. The pupil soon learns to take notes at any time, to condense and edit, as it were, the lessons developed by the teacher and the class. There is training in writing in simple language on topics where a lack of clearness is only too self-evident. The pupil finds the data he has recorded the basis of computations that give him further and more definite knowledge. Carelessness in experimenting, observing, or recording, or in following instructions, any inaccuracies or omissions, bring their own punishments. Note taking should be practiced during the lecture, laboratory, and recitation periods.

The set division, however, of school periods into lecture, laboratory, and recitation is hardly desirable in high-school work. The ideal way is to combine a little of the three in each lesson. The exercise may open with a few minutes' talk, an experiment may be shown and the class questioned, perhaps on some essential point that needs to be emphasized. Then let the laboratory work follow. The uncertainty of just what is to be the form of instruction excites the curiosity and holds the interest of the class.

Physics as taught by the lecture method alone is usually non-mathematical, and is superficial and easily forgotten. Its impress on the future thinking of the pupil is soon lost if it is the only method of presenting the subject. Whenever possible, laboratory exercises should be the foundation for lecture and recitation work. There is at present a demand, largely from those who have not delved into the real science of physics, for a broad but brief course, especially as preliminary to a laboratory course. This general course, sometimes given for a whole year, is much like the tour of a conducted party, perhaps good for the health, and interesting like a view of the earth from a flying machine. General information, the humanizing portions of the subject, engines, meters, pumps, motors, telescopes, X-rays, wireless telegraphy, etc., the things that go, practical applications, must, from lack of duplicate pieces of apparatus, be taught from the lecture table. The past fifteen years has seen a great development of laboratory courses and apparatus. There is just as much or more room for advance in apparatus for lecture-table work. It may be said that the physics that is now taught, or should be taught, is the creation of the last twenty-five years, during which time few additions have been made to the old and obsolete apparatus so long in use.

Of the questions asked from motives of curiosity of an educated or a supposedly educated man, how many, either directly or indirectly, refer to some department of physics? The history of modern civilization, one might almost say, dates from the introduction of the steam engine. Comfort and luxury have been brought within the reach of everyone by the application of the steam engine and by the electrical discoveries and inventions of the last half century. Physics, being fundamental to chemistry, meteorology, astronomy, at least should be begun early in the high-school course. The first and second years are not crowded, and the mind has not come completely under the influence of the prevailing method of studying exact mathematics and ancient languages. Young pupils learn physics because they like to; the upper classes, always burdened by a variety and amount of work, study physics often because they are driven to it. Partly because of college entrance requirements, physics for the college section at least has been removed from the second year to the third and fourth years of the course. Since a large proportion of the college classes prefer to continue other subjects instead of beginning a new one, the percentage of pupils studying physics has somewhat decreased in the last ten years. If the full benefit of physics is to be obtained, it should be studied in the first two years of the course, before habits of study have been formed by other subjects. It is the only science subject in which definite lessons for home work can be assigned for every lesson. It is somewhat immaterial in what order the several grand divisions are studied, and selections suitable for first-year pupils are easily made.

Teach from your own convictions, and do not lean on the authority of others. Familiarize yourself with some of the mechanic arts. In these days when fortunes and positions in the business world come to those of practical rather than theoretical or academic training, it would perhaps seem superfluous to urge upon science teachers the necessity of acquiring a varied range of mechanical skill. A man in the world at large was once rated according to what he knew, but now according to what he can do. The science teacher, especially the teacher of physics, is no exception. A more or less handy knowledge and skill in the simpler portion of glass grinding, glass blowing, wood and metal working, are of the highest importance. While teachers would seldom think of grinding lenses for pupil's use, still some skill in this line of work clears up many difficulties for the teacher and awakens an interest in the subject of light. Skill in the use of tools is valuable, not so much for any apparent saving in the cost of apparatus made by the teacher, but because that skill is put to use in constructing pieces of apparatus that are a pride to the teacher and the class. The interest evolved in this way turns work into play. The art of presenting physics by lectures, the use of the lantern, the making of photographs and lantern slides should be acquired by every teacher of physics. In the training of a teacher, instruction in a good high school counts for more than that received in college; for teachers are wont to teach as they have been taught, and the methods and general style of presentation and drill of the high-school course are better models for them to follow.

The college course can be improved, for those at least who are to teach, by introducing a broader general course in physics. Why cannot there be a body of lecturers who in turn might spend a week each year in residence, much after the plan of the boards of preachers in our universities? In the way suggested the best talent could be obtained, men famous for their attainments in the arts and sciences. The biographies of great scientists, their stilted portraits, exert a less potent influence than personal contact with men who have done and are doing the work of the world's progress. Many men who have not the time, strength, or general diffuseness of scientific knowledge to make them ready to fill the chair of physics in some university are well fitted by lecturing on their specialities to arouse a lasting enthusiasm in college students. Modern language departments bring across the seas men who have written things of note to give courses of lectures. Why should not the science departments bring men who have done things in the world? The advancement of science and its applications becomes doubly interesting when explained by the very scientists and inventors themselves.

Ask any of your pupils in physics, and in the most advanced classes, too, "how much of your algebra do you find useful?" "Only a little of all we learned," will be the answer. The complicated expressions so common in algebraic problems seldom occur in actual practice in applied mathematics, at least in work likely to fall to the lot of a mechanical or electrical engineer. The dozen or more cases of factoring, the intricate problems in two or more unknown quantities, are not made much of outside the algebra class. Just examine the algebraic statements of a number of even difficult problems. Once stated the solution of the algebraic equation is usually very easy. It is, in fact, impossible to invent problems that when stated in equations are nearly as difficult as the majority of the equations given in the text-books for solution.

In plotting algebraic equations, much practice is obtained in substitution, most useful in physics and all applied mathematics. Formulas can be used as tools by one who is skillful in substitution. Much less algebra of a simpler and more practical nature in the high school would help the physics teacher and save time in the mathematic course for other work usually neglected; for instance, trigonometry. In arithmetic some attention could be paid to shortened methods of multiplication and division, to the number of places of significant figures, and to rough checks in computation. It takes some time in the physics course to overcome the idea that in estimating the capacity of a tank the carrying out of the product to several places does not make up for careless measurement of the dimensions. Plane geometry has been burdened by additional theorems first set on college examination papers and afterwards incorporated into the course. And just as a mechanical tool catalog is enlarged by new inventions (does the mechanic use them all?) so the amount of geometry the ambitious teacher tries to teach grows by the addition of the new originals invented each year by the college examiners.

At the British Association in 1901, almost without exception the leading mathematicians and scientists approved a syllabus of a course in mathematics presented by John Perry. He advocates the illustration of important propositions in geometry by drawings, the use of the sine, cosine, and tangent functions and abandonment of almost all demonstrative geometry. He argues that we should reason about things rather than ideas; that we think too much of logic and too little of the matter to which that logic is applied.

A little mathematics of this practical type makes physics a more serious and scientific study. As in the case of the new pronunciation of Latin first advocated in England twenty-five years ago, and today almost universally used in this country and not at all in England, so the more attractive and less artificial course in mathematics outlined by Professor Perry will, I think, be introduced in this country long before it makes great progress in England. Why is it that the whole elementary algebra is studied before geometry and trigonometry are taken up? Cannot the interesting yet simple portions of trigonometry, geometry, and analytics, at least the use of squared paper, be taught along with algebra? The time when a Latin grammar was learned by heart before beginning simple translation is long gone by. Physics offers a use for the practical field of mathematics, and on much the same basis as in actual life. The computations of the data of an experiment have a reality not possessed by examples in algebra or arithmetic.

Practice in laboratory work should in general precede and be made the basis of class-room and text-book instruction. The actual contact with and use of apparatus gives the pupil a set of standards by which he can interpret intelligently scientific writings and follow with profit experiments performed on the lecture table. If this order of instruction is followed, the "wire edge" will not be taken off the pupil's appetite. The laboratory work being taken up first is new and fresh, and the supplementary lecture work will contain as much new matter as the pupil can receive without confusion. Why is it that the individual method of laboratory instruction is general? No one now thinks of such a method in Latin or mathematics; for in those subjects all are at one time giving attention to the same thing, and the answer of one pupil assists the others. The class is taught as a whole, and one pupil at any time is as far advanced as the others, and no farther. In the individual or go-as-you-please method commonly in use today in the teaching of physics the pupils follow printed or copied directions. As each difficulty arises, and much the same difficulties are met some time or other by every student, the teacher is called upon to settle that difficulty for each individual pupil, and the teacher moves around the class answering questions here and there, adjusting apparatus and distributing supplies as if he were the servant, instead of the teacher, and as if he were directed by, instead of directing, the class, while all the time he bemoans the large number in the class and the little time he has for each one. The end of the lesson finds the pupils at different stages of advancement and the teacher exhausted by the almost impossible task of directing at one time as many classes as there are pupils in the class. Dr. Sargent, of the Hemenway Gymnasium, was once asked if he could develop a man without the class work of the gymnasium. "Yes," he replied, "but I should become a wreck myself."

Let us consider a totally different method, one in which the class is taught as a whole and the teacher directs the class. After giving instructions for the first step, wait until all have finished before giving further instructions. If any question is asked, consider whether that question is one that will be or might be asked by a number, and after calling the attention of the class state the question and either answer it or help some pupil to answer it. Then state the second step of the experiment. While the class is working, examine a few of the books in order to see that notes, and accurate ones, are recorded. Just at this point one word has more effect in improving the notebook than many lines of blue penciling, and is less wearing to the teacher. There are now and then stages in an experiment where it is important for the teacher to see that the work is correctly done, but in general the teacher does not move around at the beck and call of the pupils. Instead of answering every upraised hand, wait till one step of the experiment is finished, and call for questions. Pupils are often impatient to have their questions answered at once, questions, too, that are answered by the directions for the next step. A question that is not worth keeping in mind a few minutes is hardly worth answering at all.

This method is applicable to classes of considerable size. Indeed the number is limited only by the lack of equipment and laboratory assistants. The whole system of popular education is made possible by teaching large classes. The tuition cost per pupil must not be many times as great as in the other subjects, if physics is to take its proper position in the secondary curriculum.

Let me describe briefly the actual teaching of a laboratory exercise. Take Newton's law of cooling, for instance. Each pupil is provided with a small tin can and a thermometer. Some of the cans are bright, others blackened. While the cans are being filled with hot water, the date, temperature of the room, and number of the thermometers are recorded. The thermometers are placed in the cans and at a signal given each minute the temperature is read and recorded. The instructor verifies one or two readings of each pupil, and now and then suggests to the whole class that about one reading in ten will be a whole number of degrees. From time to time ask what the fall of temperature per minute has been for a blackened can; for a bright can. All the pupils are working at the same rate. After thirty or more readings have been recorded, the scale on which the results are to be plotted is shown on the blackboard and a few observations of some one pupil are plotted in. During the remaining time the class begins to plot the results, or the subjects of the radiating power of different substances, or the cooling correction in heat experiments is discussed. The underlying principles of an experiment and its practical application may be emphasized at the exact point in the experiment to be most effective. With the individual method, in which pupils work from printed directions, the point of the exercise is often lost.

I advocate an enrichment of the lectures or familiar talks by new and practical experiments; the combination of lecture, laboratory, and recitaing because he puts himself in harmony with the animal and compares the struggle for existence of the animal he is studying with his own trials and difficulties. By and by he gets thru with the type study and takes another specimen. True to the conclusions of his first study, he finds that difference in structure is associated with different surroundings and different ecological problems. Finally he has on hand a knowledge of structures of sufficient variation to produce a scheme of classification to which he now turns with new vigor. This is to every student the legitimate outcome of the investigation of a type. In no dissimilar manner does a student of phyisography proceed. Whether the type be a cyclone, a tornado, a river system, a mountain ridge, a commercial center, or a nationality, its structure is studied with all the known conditions and variations, original observations are made as far as possible, and the observations of others are interpreted and compared. By this means definite information is obtained which serves as a basis of a classification founded on natural characters as observed and interpreted. As in zoölogy when a family group or genus group definition has been worked out it becomes at once a standard for comparison, so in physiography, when a distinct form of climate, landscape, ocean current, or production has been given a class or group name, it becomes a representative of the characteristics which form it, wherever they may be found.

To the general reader and the casual observer this process may seem unnecessarily encumbered by detail of method; but when this inductive work has been thoroly done and the application of it is made to the various regions of the earth, the rapid grasp of the essential ideas of each topic proves the value of inductive study. I am aware also that this introduces into physiography a mental activity that has fallen into disrepute in biology in recent years, but altho it may have been necessary to discredit and even force from the schools a classification that was arbitrary until a more rational one could be substituted, yet it is my firm conviction that biology will never realize its fullest possibility until the classification of plants and animals that have been collected by the student becomes an essential part of the study of types.

But the culture value of physiography is increased by another line of investigation, which has its parallel and perhaps its origin in the study of zoölogy. This line is life-history, or morpho-genesis, which is often made the basis of classification. This is the application of the inductive processes which I have described to the individual, and shows relationships which are often unobserved in the type at the time it is studied. This is of the greatest possible value in the study of the evolution of present forms, and in the solution of all kinds of physiographical and geological problems.

It is thus clearly seen that physiography is a natural rather than a physical science, and that it deals with the application of forces in the production of natural phenomena, rather than with the forces themselves in individual occurrences, as is the case in chemistry and physics.

METHOD OF TEACHING AND STUDY

The placing of physiography in the scheme of sciences throws some light upon the proper method of teaching and study. Its subject-matter has often been treated by the text-books as tho it were a mass of information to be memorized under topical headings, and the average teacher will not rise above the ideal set by the adopted text. Such an arrangement was common even a quarter of a century ago, but the revival of the last score of years has done much to develop order and system, as well as a new subject-matter that promises much for the future.

Since the primary source of information in this work is observational, it is necessary that the student be trained to observe accurately, and to record his observations in a conventional way. Furthermore, as his general conclusions must be based more or less on the work of others, the necessity of training in the interpretation of maps, diagrams, pictures, and descriptions is manifestly imperative. This training has been painfully lacking in the past among teachers of secondary schools, and until such deficiency is remedied progress in this direction must be slow. This preliminary training in interpretation is no small accomplishment when we consider that a map often represents a whole volume of facts to the trained geographer. The text-book must ever be depended upon for general guidance and the main points of classification of the subject-matter. It suggests, directs, and holds the sequence where other sources of information fail.

However, the text is not the only source to which one must go if the full possibilities of the subject are to be approximated. Among other agencies laboratory work holds an important place. It develops skill in the interpretation of the work of others, and mechanical skill in representing the observations of oneself and others, and crystalizes the entire work.

In the study of atmosphere, if the weather map has been used with the necessary clearness of interpretation, the successive data for an entire storm period may be charted on blank maps in the laboratory, and diagrams for each day of progress made. Likewise, with maps of the harbors of the eastern coast of the United States before him, the student may trace the old river channels of the bays and draw the original condition of the dismembered rivers. A river system may be drawn to scale, its topography charted and drawn from altitudes furnished by the United States government, its life-history indicated, its geological structure worked out by section, and its geographical value drawn in colors. A laboratory exercise of less value, but of considerable interest, is the modeling of a topographic form of any kind after its surface has been drawn to scale and its relief indicated by contour lines.

Thus laboratory work develops mechanical skill and renders more accurate the entire work. But it does more; it gives a feeling of confidence in working out the details of any proposition and representing them in a graphic manner. It may be used thruout the entire course with every topic studied.

Reference reading makes up what the text-book lacks, and completes the information necessary for comparison and classification. If assigned to sections of the class the views of the entire class may be broadened and the knowledge of the few intensified. It has always been a serious obstacle to intelligent reference work that books procured for the purpose were written by travelers and others who were casual observers rather than trained geographers, but happily this difficulty is disappearing, and thru the agencies of geographical societies and national governments, as well as some enterprising publishing houses, much literature, both accurate and extensive, has been placed at the disposal of students of this subject.

Not less than one-fourth of the work of the course in physiography should consist of field work, or of exercises growing directly out of such work. Much has been said upon this subject recently, and there seems to be a general impression that something called field work should be undertaken. However meritorious, field work is so rare that a survey of the methods employed and the results gained in the average schools, almost induces despair to an advocate of the method. But a little reflection will lead to the conclusion that much laboratory work in the past has been a waste of time, and that with a better understanding of its aims and legitimate results the laboratory has become an indispensable factor in the teaching of science. So there is hope that field work, when better understood and in the hands of trained teachers, will reach its proper place in the methods of teaching all grades of geography.

The idea that work in the field is a pleasure-seeking excursion or an outing for recreation must be abandoned, and in its stead must come the realization that it is but the going to favorable conditions for the solution of problems often quantitative in character. No one who has taken work under that prince of American geographers and teachers, Professor W. M. Davis, can fail to realize that field work is a method of solving problems, and that it requires concentration, research, and calculation not surpassed by any other kind of exercise in the entire subject.

The nature of field work must vary with the locality, but all localities present many problems of a similar kind. One series of exercises is the representation on paper of a landscape of varying altitudes by modern methods of mapping. Another valuable line of work is the study of the methods and results of the river system considered as a unit of denudation. Another is the changes in rock, soil, and vegetation that takes place on the hillside. Besides these there are the larger problems of geological structure, economic value of different rock strata, evidences of dynamic force, glaciation, etc. Such work brings a student into direct contact with the living problems of geography. Its value is greatly increased by the laboratory and library work which broaden the individual into the general notion.

A COURSE IN PHYSIOGRAPHY

The secondary school, as has been set forth, is too much engaged in preparing for practical life to spend more time than is absolutely necessary on the theoretical side of physiography. No issue is taken in this paper with modern text-books on this subject, but it is insisted that the teacher should not depend upon the text that the students use, or upon any text, for his knowledge of the subject and its applications in the industrial affairs of life. No subject has reached its highest usefulness in the secondary school until its resources have been exhausted to find that organization of subject-matter that will make the student face intelligently the vital problems of comfortable, honest living. This should rarely, if ever, be done at the sacrifice of systematic presentation, for it is clear that the student's methods of study in after life will be influenced no little by the habits in gaining and using knowledge which his teacher has helped him to form.

Details of a course cannot be given in the space allotted to this paper, but it may be observed that much is to be expected from the impetus that has been given during the last few years to the investigation of the relation between geographical conditions and organic life.

RESULTS THAT MAY BE EXPECTED

What results are to be expected from a certain line of study in the schools is a legitimate inquiry which should concern no other class of people more than the teacher or the administrator of a course of study. The physiography which I have set forth is certainly definite enough in purpose to bring about results which may be forecasted with a reasonable degree of success. It would at least prevent the person who had taken such training from expecting a gold mine from a limestone ledge, or a successful agricultural colony where the season is but seventy-five days in length. It would also lend much profit as well as pleasure to travelers, who are more abundant in this republic than in any country in the world.

But the greatest benefit derived from it in the secondary school is the new meaning that it gives to history and national development of all countries, ancient and modern. The dependence of the motives and activities of man upon his environment makes history and physiography so dependent upon one another that neither is complete without more or less consideration of the other.

DEPARTMENT OF SCHOOL ADMINISTRATION

SECRETARY'S MINUTES

THURSDAY, JULY 10, 1902

The Department of School Administration met at 2:30 P. M. in court room No. 1, new City Hall, and the meeting was called to order by President Israel H. Peres.

Secretary Bruce moved that, inasmuch as the three speakers who were to appear on the following day's program were unable to appear, the meeting be closed in one session. Carried.

A nominating committee consisting of C. H. Parsons, of Iowa, Dr. J. F. Force, of Minnesota, and B. F. Hunsicker, of Pennsylvania, was then appointed.

President Peres then delivered his annual address, after which he introduced Miss Anna Doerfler, who read a paper on the "Ideal Teacher."

This was followed by a paper on "Progress in the Consolidation of Rural Schools," by State Superintendent J. W. Olsen.

The secretary then submitted the report of the Committee on Schoolhouse Legislation.

After some discussions by L. P. Ludden, of Lincoln, Neb., C. H. Parsons, of Des Moines, Ia., Harlan P. French, of Albany, N. Y., and Dr. E. A. Donelan, of St. Joseph, Mo., the following form of a general legislative measure was adopted:

AN ACT

Providing for the heating, lighting, and ventilating of public schoolhouses, and fixing penalties for a violation of the provisions thereof.

SECTION 1. Be it enacted by the people of the state represented in the . . . . : It shall hereafter be unlawful to let any contract for or to construct any public schoolhouse, or other building to be thereafter used for school purposes, the lighting, heating, and ventilation of which is not in full accord with the provisions of this act.

SEC. 2. All public school buildings hereafter constructed or remodeled for school purposes must be lighted by windows placed in one rear or side wall of each class and study room, and such windows shall contain glass surface of not less than one-fifth of the floor space of each room; and all desks and seats shall be so arranged that the windows will be on the left, or in the rear, so far as possible, of the pupils.

SEC. 3. All class and study rooms shall contain not less than fifteen square feet of floor space and not less than one hundred and eighty cubic feet of air space for each pupil.

SEC. 4. All public schoolhouses or school buildings of more than three rooms each which shall hereafter be constructed or remodeled for school purposes must be provided with such heating and ventilating apparatus as will facilitate the introduction of warm air, when occasion requires, into each class or study room, not less than eight feet above the floor line, with provision for the exit of impure air at the floor line: and the whole shall be so arranged that the required temperature of seventy degrees can be maintained thruout each room even in the coldest weather, and the air changed in each room (combined average measured at inlet and exit openings) at least eight times in each hour, without lowering the temperature or creating a noticeable draft at or below the breathing line.

SEC. 5. All closets and urinals must be so constructed as to provide for the absolute seclusion of the pupil using the same. They must also be provided with vent flues, so arranged that all foul odors and air will be carried out below breathing line.

SEC. 6. Any contract for the construction or remodeling of any school building, not in conformity with the requirements of this act, shall be void; and any public school officer or contractor who shall violate the terms and conditions of this act, by letting or accepting any contract for the construction or remodeling of any public schoolhouse or school building not in conformity with this act, shall be deemed guilty of a misdemeanor, and shall be subject to a fine of not less than two hundred dollars, nor more than one thousand dollars, for each offense.

The Committee on Nominations then submitted the following list of officers to serve for the ensuing year:

President—Harlan P. French, Albany, N.Y.
Secretary—William George Bruce, Milwaukee, Wis.
First Vice-President—Dr. J. F. Force, Minneapolis, Minn.
Second Vice-President—Grafton D. Cushing, Boston, Mass.
Third Vice-President—B. F. Hunsicker, Pennsylvania.
Chairman Executive Committee—Israel H. Peres, Memphis, Tenn.

Dr. Donelan, of Missouri, then submitted the following resolution, which was adopted:

WHEREAS, The health of the children in our schools is essential to prosperity and good results, and

WHEREAS, The various diseases, including consumption, myopia, and nervous prostration from excessive application to studies, cannot be detected by either superintendent or teachers in a large majority of cases in time to give the necessary relief and to arrest the spread of those that are contagious, therefore, be it

Resolved, That it is the imperative duty of school boards or city boards of health to appoint medical examiners in the interest of the health and lives of children attending the schools.

At this point President-elect French assumed the chair, and in a few well-chosen words promised his loyal efforts to advance the growth and usefulness of the department.

Dr. Donelan then submitted the following resolution:

WHEREAS, Many children form habits of spending the small change given to them by parents or friends for articles that are not only injurious to health, but lead to excess and extravagance, and

WHEREAS, Economy, frugality, and self-restraint leads to thrift in life, therefore, be it

Resolved, That penny saving banks should be established in our schools.

On motion of Mr. Peres the resolution was referred to a special committee of three to report next year.

The chair thereupon appointed upon the committee Dr E. A. Donelan, St. Joseph, Mo.; Hon. H. S. Prophet, Lima, O.; W. S. Ellis, Anderson, Ind.

The department then adjourned.

WILLIAM GEORGE BRUCE, *Secretary*.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

BY ISRAEL H. PERES, MEMPHIS, TENN.

A study of Professor Huxley's series of lectures, collected under Science and Education, promptly reveals that over a generation ago the English public were confronted with the same educational problems, substantive and administrative, as today confront us. For that matter, ever since society has undertaken education the same problems have presented themselves, and curiously enough the discussion has been carried on, not only in a similar tenor, but also often in the same phrase. It has been, and always will be, a matter of degree.

We of the present have made a remarkable advance. Many ideas of the old masters in art have been realized, and we may be positive that a steady improvement will continue. Even the most skeptical no longer doubt Mr. Darwin's conclusion that the presence of a body of well-instructed men, who do not have to labor for their daily bread, is important to a degree which cannot be overestimated, as all high intellectual work is carried on by them, and on such work material progress of all kinds mainly depends, not to mention other and higher advantages.

And so our universities are becoming more and more places of research and investigation, and are the nurture grounds whence arise mental and moral athletes to successfully battle against ignorance, error, prejudice, and superstition.

These men in their turn are preparing others to direct and administer education in all its branches, and their influence is thus projected by a division of labor into all of the ramifications of educational work thruout the land.

The National Educational Association is a part, and an important part, of this educational impetus, and each of its members is doing work in a good cause.

Those who give their time and attention to the study, preparation, and formal presentation of the many problems in the several departments work an incalculable benefit to the cause of education, and therefore to the cause of human progress.

Certainly, then, our gratitude is due them, and our obligation to those who arrange the detail of the convention work can hardly be adequately stated. These hold the key to the Association's successful meetings, and an annual onward step attests their faithful and intelligent effort.

Industrial conditions are kept in an artificial state by artificial legal restraints, with the result that the spirit and individuality of the millions of men and women who work with their hands are sunk into lifeless machines — silent giants of industrialism, who reck not the souls of the workers.

This phase of our present economic status is one of the chief reasons why there seems to be no outlook for the majority, and why we hear so much about the uselessness of too much education.

This is false doctrine. The trouble is that education is not prized for its own sake, for its intrinsic value. It is looked upon too much as an investment. It is demanded that your education be such that at a moment's notice you may convert it into what our financial geniuses term "the coin of the realm." Therefore, you are told not to waste your time acquiring an education, but learn a trade. The better advice is, do both. Let us teach our children not to gauge a man by what he does for a living, but what he is. Let us teach them not only the dignity of labor, but the sublimity of man himself. Let us teach them that mental culture consists with the mechanic arts, sciences, and employments. Then will the man become the master and the machine the automation; then will our education, higher or lower. be, not the shadow of a contented life, but a substantial blessing.

PROGRESS IN CONSOLIDATION OF RURAL SCHOOLS

J. W. OLSEN, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, ST. PAUL, MINN.

The most important educational problem before America today is the rural-school problem. The general upward trend of our state university work, the public secondary schools in our cities articulating therewith, and the great work in our cities and towns in turn articulating with our secondary schools, is becoming definitely fixed and established. Great progress has been made in university work and city school work during the last quarter of a century, and while great progress has been made in building country schoolhouses, in furnishing libraries, text-books, suitable apparatus, and better trained teachers, rural-school advancement has not kept pace with the wonderful progress in our city schools and state universities. This is due to the natural ultra-conservatism of our rural population, to the abandonment for the city and the west of farms in the eastern states, and to conditions inherent in the isolated one-room schoolhouse itself, where organization and gradation is almost impossible, where nepotism and personal favoritism on the part of local school trustees too often prevent efficient and continued effort by the teacher; where the environment is too narrow to broaden the intellectual horizon of the pupil by active rivalry and keen intellectual competition with others in his class.

We have already reached the stage where the advocate of consolidation no longer occupies debatable ground in a body of school men. It is conceded by state and county superintendents and other administrative school officers everywhere that the most rational solution of the country-school problem lies in combining the small, isolated school units into larger ones and transporting the pupils to and from schools at public expense.

In response to inquiries, and from examination of state superintendents' reports, I find that twenty-six state superintendents are in favor of transportation of pupils, while no state superintendent expresses himself as opposed to the plan where normal conditions prevail, and from some I have no expression of opinion. Among ourselves, as educators, we agree with practical unanimity that it will insure better teachers; insure better classification; stimulate intellectual competition, severer effort, greater interest and enthusiasm among pupils; increase attendance; insure punctuality; provide better apparatus, text-books, and libraries; provide longer and more regular terms of school; guard the health of the children; keep the older children longer in school and at home under parental care; educate toward the farm and farm life, and discourage the tendency to drift into centers of population; provide better heated, lighted, and ventilated schoolrooms; promote the growth of reading circles, lyceums, and other literary and culture movements among the adult farm population —

and all this, as a rule, at no additional cost after the first expense of providing the proper schoolroom.

By turning to the Report of the United States Commissioner of Education for 1894–95, we learn that Massachusetts, New Hampshire, Vermont, and Connecticut have made definite legal provision regarding the transportation of children to school. By 1896, New York, Maine, New Jersey, and Nebraska were added to the list, while Ohio had a few consolidated districts transporting pupils under a special act. In the year 1900, State Superintendent L. D. Harvey, of Wisconsin, issued a bulletin showing that the following eighteen states have laws allowing the transportation of pupils at public expense, altho at that time only thirteen were availing themselves of the privilege. These eighteen states are :

Connecticut
Nebraska
Rhode Island
Kansas
North Dakota
Massachusetts
Pennsylvania
Iowa
New York
Wisconsin
Ohio
Indiana
New Jersey
Vermont
Florida
New Hampshire
South Dakota
Maine

To this list must now be added Washington and Minnesota, while in Michigan and some other states pupils are being transported either by implied powers, without legislation directly authorizing it, or by sufferance.

In addition to the above, Illinois, Missouri, and Virginia authorize by law and have township high schools, Tennessee has consolidated schools, and California authorizes and has what are known as "union high schools" in the country.

As many states report only biennially and others do not gather statistics in regard to transportation, it is impossible to present complete comparative statistics showing progress in consolidation, except irregularly from a few states, which probably illustrates the general tendency in favor of the movement. In 1899 and 1900 New Jersey expended nothing for transportation. In 1900 and 1901 she expended $4,420.62. Ohio reports thirty-three districts transporting pupils last year. The amount expended for transportation in Massachusetts increased from $3,648, in 1890–91, to $75,608, in 1894–95, and to $141,754, in 1899–1900 ; in Vermont, from $11,122 in 1893–94, to $26,492, in 1899–1900.

In 1893, free transportation of pupils was authorized in Connecticut. In 1900–01 the number of schools closed was 84, pupils transported 849, cost, about $9,817.

In Vermont free transportation is growing in favor, as attested by the fact that the state expended for this purpose $11,112 in 1893–94, and $26,492, in 1899–1900. During the latter year 726 schools were closed and 2,909 pupils transported.

New York has a system of contracts whereby one district may contract with another for the education of its pupils and still draw the district quota of public money. Connected therewith is a provision of law permitting the district contracting to transport their pupils to the district contracted with. The first contract law was passed in 1896; during the next year twenty-seven districts took advantage of the law and contracted with adjoining districts. The number taking advantage of the contract system has increased from that time until the present year, when about 300 contracts have been filed.

Transportation was first tried in Iowa in 1896 in two districts. This year pupils are transported in about fifty districts.

In Indiana, transportation was first undertaken ten years ago. Last year 2,339 pupils were transported over 164 routes in fifty different counties.

From South Dakota, Superintendent Collins reports that perhaps in one-fifth of the districts some transportation is provided. Since reports were issued transportation has been operative in a half dozen Mississippi Valley states.

Progress has been made in providing township high schools in a number of states, and where the township is not a feasible school unit, such units as seem expedient have been carved out into high-school districts. Ten states report township high schools or their equivalents to the number of 1,319, Indiana leading with 491. Statistics from six of these states show an enrollment in this class of schools of 30,404, the largest being 13,183, in the state of Maine. The first township high school is reported from Illinois in 1867. These figures show that township high schools have grown in favor very rapidly.

All these figures encourage the view that the contest we are engaged in in favor of better schools thru consolidation is more than half won. The greatest difficulty is overcome when the first half dozen well-managed consolidated schools in a state have demonstrated beyond serious controversy the success of the plan. How rapidly this plan will progress in the future depends upon a number of things:

First, the general intelligence and public-school spirit of the people.

Second, upon the topography of the country; whether or not the roads are in good condition during most of the school year; whether the territory is well adapted to large units, or is segregated into smaller ones by hills, creeks, lakes, or other natural barriers.

Third, whether legislation makes it easy and natural or artificial and difficult.

Fourth, consolidation will also depend in a large measure upon the prevailing system of school government and organization.

People are not inclined to employ a unit of government that is not a governmental unit for other purposes also. In New England and states following the New England plan wide powers in general government are delegated to the town or township, carrying with it township control of schools under a township board. The step for a number of separate schools in a township under control of one board to a central graded school where pupils are transported is short, easy, and logical. Upon this point the report of the Committee of Twelve well says: "In the northern states the cause of school consolidation depends intimately upon the adoption of the township unit system. A certain amount of consolidation can be affected by the abolition of small districts. It may be possible also for several districts to merge their schools into one, for the time at least, and still preserve their independence, but it is manifest that the first plan will not prove effectual and that the second one will be infrequent and precarious."

Where the county is more largely the unit of school and general government, as in some of our southern states, and where central county authority is vested with wide discretionary powers in locating schoolhouses and defining school-district boundaries to which the entire situation presents itself in more accurate perspective by being removed from the narrow view too often taken by selfish interests in a small neighborhood, progress in consolidation may be expected, unless prevented by topographical conditions or lack of school interest.

The greatest difficulties are met in states like the one I have the honor to represent, Minnesota, where the township is hardly a unit of government for any purpose whatever, except to lay out and keep in repair a local highway; where assessments are reviewed by a county board of equalization; where taxes are "run" by a county auditor and collected by a county treasurer; where legal business nearly all centers in the county seat; where township and school-district boundaries are rarely coincident; and where each little school-district is a unit in itself, having three officers with almost sole control of its tax levy and school management; and where the county exercises no control of school affairs, except thru the county superintendent, whose powers are limited almost entirely to advice, personal influence, and collecting statistics for the department of public instruction.

Where people have been educated away from the township system and the larger school for a half century or more under such a system of overburdened democracy it is not surprising that the introduction of the consolidated school is steadily resisted.

It is manifest that in those states where similar conditions prevail consolidation must be encouraged by easy steps, arousing as little antagonism as possible. Only to an inconsiderable extent will they establish township schools. Minnesota has had a permissive township law for seven years, and yet not more than one or two township schools have been organized under it.

Personally I believe that the plan of New York and Wisconsin authorizing a district to suspend its school and arrange with any adjoining district or districts for the instruction of children and transporting them, if necessary and expedient, and yet be able to maintain its separate organization and participate in the apportionment of school funds, is the most rational method of promoting practical consolidation in states where the small independent school-district is the school unit, and not the township or county. Undoubtedly in many places school-districts can be induced to favor temporary suspension of school for a term, or a year, whose prejudice of tradition would not sanction their formal dissolution and union with other districts. This contract system will naturally lead to formal consolidation where best and necessary.

Such a contract law was passed in New York in 1896, and it is remarkable that 300 contracts for the education of children in adjoining districts are already filed with the state superintendent of public instruction this year.

The free rural delivery of mail, promoting the good-roads movement, the telephone, and the tendency to industrial co-operation, bringing farm life into closer relation and sympathy, will add impetus to this movement.

In Minnesota alone we have 131 farmers' mutual fire insurance companies, and about 600 co-operative creameries. We have rural communities grouped about a co-operattve creamery, department store, live-stock shipping association, fire-insurance company, lumber and fuel company. Where this condition prevails the next step is co-operative schools.

From one short year to another we may not be able to discern great educational progress in our rural communities, and yet if we measure educational progress during the last decade or quarter of a century, must we not conclude that we have advanced almost by leaps and bounds? Enrolled in the cause of popular education, we have by no means enrolled in a lost cause. In our country there can be but one answer to every great question confronting us, and that ultimately the right answer. The American educator, co-operating with intelligent patriotism and public spirit, will ultimately realize the most effective system of school organization and administration, that in our country a race of physical, intellectual, and moral giants shall be reared.

LIBRARY DEPARTMENT

SECRETARY'S MINUTES

FIRST SESSION.—THURSDAY, JULY 10, 1902

The first meeting of the Library Department of the National Educational Association was held in the reading room of the University Library, Minneapolis, Minn., at 2:30 P. M., and was called to order by Miss M. E. Ahern, secretary, neither the president nor the vice-president being present.

The meeting opened with a selection, "The Watersprite," *Schumann*, by the Minneapolis Ladies' Quartette.

Dr. Wm. W. Folwell, librarian of the University of Minnesota, extended a word of greeting. A letter from the president, J. H. Canfield, regretting the necessity of his absence and pointing out what seemed to him to be the work before the department, was read by the secretary. At this point the vice-president, Mr. Reuben Post Halleck, of Louisville, Ky., having arrived, took the chair.

The first paper was presented by W. A. Millis, superintendent of schools, Crawfordsville, Ind., on "The Library as an Educator."

The second paper, on "Libraries and Schools, a Double-Faced Question," was presented by Miss Emma Fordyce, teacher of physics and chemistry in the high school, Cedar Rapids, Ia.

This was followed by an address by A. H. Hopkins, assistant librarian of the John Crerar Library, Chicago, Ill., who brought greetings from the American Library Association. At the close of Mr. Hopkins' address Vice-President Halleck introduced Dr. J. K. Hosmer, president of the American Library Association, who addressed the department.

The papers of the afternoon were discussed by Reuben Post Halleck, principal of Boys High School, Louisville, Ky., J. I. Wyer, Jr., librarian University of Nebraska, A. H. Hopkins, assistant librarian John Crerar Library, Chicago, Ill., O. H. Bakeless, principal Carlisle Indian School of Pennsylvania, and Miss Emma Fordyce, teacher of science in high school, Cedar Rapids, Ia.

Miss Ahern presented a proposition from Chairman J. C. Dana of the American Library Association Committee on Co-operation with the National Educational Association to prepare a manual of instruction in the use of libraries for normal schools to be issued by the National Educational Association for the betterment of the library service in the secondary schools. A motion was offered by J. I. Wyer, Jr., of the Nebraska State University, that the Library Department heartily indorse the idea and request the Board of Directors of the National Educational Association to take favorable action in the matter. The motion was seconded, and, after some discussion commending the idea, was unanimously carried.

The Committee on Nominations was appointed by the vice-president as follows:

J. I. Wyer, Jr., of Nebraska.
Miss Gratia Countryman, of Minnesota,
O. H. Bakeless, of Pennsylvania.

The meeting then adjourned.

SECOND SESSION.—FRIDAY, JULY 11

The meeting was called to order at 2:30 P. M. in the university library. The vice-president being absent, the secretary again took the chair. Proceedings were somewhat delayed by the absence of the speakers for the afternoon.

The first paper was presented by J. M. Greenwood, superintendent of schools, Kansas City, Mo., on "What May the School Properly Demand of the Library?" The paper was discussed by R. H. Emberson, of Missouri, Miss M. H. Prentice, of Ohio, and A. H. Hopkins, of Illinois.

The second paper was presented by Miss Agnes Robertson, county superintendent of schools, Cherokee, Ia., on "School Libraries in the Rural Districts." This paper was discussed by J. A. Lapham, of Iowa, J. M. Greenwood, of Missouri, and Miss M. E. Ahern, of Illinois.

The Committee on Nominations reported the following, who were unanimously elected as officers for the ensuing year:

For *President*—James H. Canfield, of New York.
For *Vice-President*—Reuben Post Halleck, of Kentucky.
For *Secretary*—Miss Mary Eileen Ahern, of Illinois.

The secretary, after urging the teachers to greater interest in the library section, declared the meeting adjourned.

MARY EILEEN AHERN, *Secretary*.

PAPERS AND DISCUSSIONS

THE LIBRARY AS AN EDUCATOR

W. A. MILLIS, SUPERINTENDENT OF CITY SCHOOLS, CRAWFORDSVILLE, IND.

An evident revolution of function has occurred in recent years in the management of libraries. Traditionally, the office of the library, upon whatever foundation, was the conservation of knowledge, as distinguished from its dissemination. The primary object was the collection of books. If they were rare or quaint, the better. These were grudgingly loaned out to readers who perchance had discovered the hiding place of the treasure. The emphasis was placed on the number of volumes, their wealth, their immediate history. Their use was of secondary moment. More frequently than not their use was discouraged by screens and bars. Certainly no effort was made to encourage extensive use. Yet, even under these conditions, the library has been the means of vast service in the development of culture. The history of intelligence reveals a great debt of the world to the libraries of ancient as well as modern times. But in the main the library has been passive in this process. It has rested passively and been drawn upon by the infrequent scholar. It did not project itself into the life of the people. It was not fired with the purpose of active service. It was not conscious of the possibility of surrounding the great scholar with a multitude of well-informed and intelligent people. It was a store of learning, an end rather than a means. Those of you who are engaged in library organization appreciate that we have not yet entirely gotten away from the traditional notion of the library in the towns and smaller cities. The ghost frequently materializes in the form of a board, which insists that the important thing is to get books and books. And too frequently it assumes the form of a librarian who sees the circumference of her mission in marking up book lists, cataloging new purchases, charging the high-school girl and the dilletante with the latest novels — so new that the binder's paste is yet green — in crediting patrons with books returned, and fussing at children who apply because they leave finger prints on pages divine.

But this traditional notion is passing away. A new function is being recognized. The librarian sees new possibilities. She appreciates that books are valuable in proportion to their use. The library has become active, democratic. The dissemination of knowledge is made the primary function. Books are selected and shelved and cataloged in view of their use. The library is becoming propulsive in the community, and formative. It not only endeavors to satisfy the wants of the reading public, but has begun to form and reform those wants, to cultivate taste, and stimulate culture. This, I take it, is the spirit of modern library management, and it certainly is peculiarly the function of the public library.

The public library may and should be an educative agency. That it is not always so is patent to the casual observer, and to be deplored. Its failure to improve opportunity is especially prevalent in towns and small cities. We have become so accustomed to the various ladies' and club libraries which are maintained wholly for purposes of amusement that it is difficult to permit the public library to assume greater dignity. It is difficult for the public to learn that the library is not an institution for public entertainment, an agency for assisting unoccupied people to while away time, a substitute for the old-time quilting bee, with its buzz of neighborhood gossip, and taking about the same place in the lives of one class of people that the clubhouse takes in the life of the other class. If the public library is to take its proper place in the community, the people must be taught to regard it as an integral part of the educational system. The library must be organized with this spirit and purpose. It must be organized and regarded as an indispensable part of the educational machinery, a special agency with a function which no other agency can perform. The librarian should regard herself and be regarded primarily as an educator; not a class-room teacher, not a vender of alphabets and beginnings of culture, but an educator in the larger sense of insight into the educational needs, means, and ends. She should combine wide scholarship, knowledge of books, and the possession of culture with an apprehension of the cultural conditions of the community, its intellectual impulses, the lines of development needed, and the ability to arouse and direct these impulses toward greater sanity and truer culture. She should be trained not only in the art of library administration and the matters that pertain to her routine of duty; she should be conversant with educational problems and situations. She should apprehend these problems from the larger standpoint of social progress. Dr. Small says that the teacher should regard herself as more than a hearer of lessons; that she must regard herself as a community builder. So must the librarian. She must rate herself as more than a shopkeeper. She, too, must be a community builder. And more, the librarian must insist that she is the larger factor in the library. Boards of control and books are quite valuable as tools with which to do the work in hand, but the real efficiency of the library is measured by the wealth of the librarian in her own right. Hawley Smith says in his own fashion: "When the stage carpenter becomes the star performer the drama is sure to suffer." The librarian must be the star performer if she would reach the measure of her opportunity. We have learned in the schools that the teacher is in herself more than houses and books and equipment. Librarians are subject to the same law.

The work of the school is threefold:

1. To awaken aspiration, both general and specific.

2. To give the alphabet of learning and activity—that is, to give the child such introduction to the several lines of learning, art, and enterprise as will reveal to him and nourish his special aptitudes, and at the same time put him into position to live sympathetically with those who follow other activities than his own.

3. To train the powers of thought and expression.

Or, looking at the function of the school from the standpoint of the library, it is responsible for awakening in the child ambition to be well developed, to be a somebody; to awaken the impulse to know what the world has thought and done; for teaching him to read, and, to some extent, for developing taste for proper literature. When the school has accomplished these requirements it has reached its limitations. When the child has been equipped with the rudiments of science, history, language, and mathematics, has been awakened to the possibilities of culture and is ambitious to possess it, when he has learned how to read and think, the school has done the most that it can do. Its primary business is to equip him with the tools of learning and culture and the impulse for larger attainments. Beyond this point library, press, pulpit, platform, and practical life must take the boy. The school is but one of many educational agencies, and cannot, if it would, undertake to do the work of other agencies. The school can teach the children to read and stimulate the impulse to read, and to some extent the right books, but the library must see that they continue to read, that they read well, and that they do read the right books.

In one respect the library is supplementary to the school. To a large extent the public library should stand in the same relation to the public school that the college library sustains to the several departments of the college. The best teachers are coming to see that the text-book in the hands of the pupil is at the most merely a working guide or manual, rather than a compendium of information on the subject in hand. They feel the need of access to fuller sources of information than the meager contents of text-books and schoolroom helps. With the growth of this feeling on the part of the school, the library has a large opportunity for effectively reinforcing and enriching the instruction of the school by placing within the reach of teachers and pupils additional information on the subject under study. Particularly is there an opportunity for this enrichment in the courses in history, science, geography, and literature. It is quite possible thru co-operation of teacher and librarian to make this supplementary service of the library as effective in the elementary school as the college library contributes to the completing and rounding out of the work of the higher departments of instruction.

In another respect the library and school are complementary. Each conditions and helps the other. This complementary relation is quite evident in the contribution which each makes to the other in a practical way. But there is a higher and deeper phase of co-ordination. Aside from the home, library and school are the chief educational agencies. Together they cover fairly well the whole of the educational field, yet each has its own particular sphere. In some particulars these may overlap, but in the main they are distinct. The school awakens wholesome personality and social impulses, both general and specific, trains the individual in the elements of the social arts, trains him to think and to study, equips him with the elements of learning. The school endeavors to train the individual for a larger and more permanent growth to come from activities beyond its doors. It supplies him with the implements with which he may attain to culture. The promotion of this larger growth beyond the school is the special field and the larger opportunity of the library.

Putting it from the viewpoint of social science, the library is the agency specially organized and maintained by the community to promote its culture. And by culture is meant more than reading and more than information. It is that compounding of learning, taste, judgment, wisdom, and peculiar mental tone that come of being in sympathetic acquaintance with what has been thought, felt, and done in the world, and of companionship, even remote, with the men and women who have thought, felt, and accomplished. This is the field, I take it, of the library and the librarian. She is the agent, the library her instrument, her kit of tools. I am aware that this function presupposes ability and leadership of no mean order, and yet the fact remains, I think, that the really effective service of the public library is to be measured by the character of the taste, intellectual tone, and literary impulse of the community in which it is maintained. It is this deeper cultivation of community spirit, of taste, judgment, and intellectual tendency, which is of real concern. The number of books on the shelves, and whether the circulation is larger than last year or not, are of little consequence, expect as they indicate the condition of the community in respect of its culture and aspiration for a larger culture than it now possesses. Whether the library succeeds in making perceptible improvement of this community tone from year to year must, within the profession and without, be the test of its efficiency and of the wisdom of its maintenance; for with the community, as with the individual, it is the measure of the inner man which prevails.

The work of the library is largely with the adult population, and should be; yet in order to reach this population effectively it is necessary to begin with the children, that is, in the schools. As soon as the child can read the library must get him to reading suitable matter. It must see that he forms the reading habit early, and that he reads matter of literary merit. It must see that the admonition of Dr. Holmes is obeyed — that the child shall grow up in the atmosphere of good books. Communities are reformed by the proper formation of their children. All culture tendencies have their beginnings in childhood. Standards of taste and judgment are formed in the growing generation. It is in promoting right literary beginnings in children at school that the librarian most surely controls later cultural conditions. The library should also encourage masterly study by facilitating research in all lines of school work, and it must see that pupils are taught how to use books. If the use of the library is made a vital feature of their school life, it certainly will continue necessary to them after they have gone from the class-room.

There are yet some things which teachers have to learn. Important among these as bearing on the efficiency of the library are:

1. That reading is the primary subject of instruction.

2. The need of greater familiarity with books on the part of teachers, and of better literary taste.

3. The introduction into the school of the spirit, method, and habit of research; greater and wiser use of books, maps, charts, and other reference matter.

4. That aspiration for culture is the motive which effectively determines the pupil's future growth, and that in giving the pupil such aspiration the teacher is doing her noblest service.

But there are also some things which librarians have to learn:

1. That the librarian's work is primarily educational.

2. That she should hold herself reasonably responsible for the character of the reading and taste of the community, and particularly of its youth.

3. That her worth is to be measured by the quality of taste and mentality resulting, rather than by the quantity of reading done.

4. That it is a part of her office to correct wrong literary tendencies in her community.

5. That the literature placed in the hands of children should always be literary, and suited to their stage of development physically and spiritually.

There are at this time two serious problems common to school and library. One is the danger of too much reading, and too rapid reading, by all classes of people, but especially by young people. While thousands are strangers to books because they do not read, there are other thousands who are just as truly strangers to the same books because with all their much reading they read not. Haste, high tension, flitting images, conspire to leave but slight impression. Our people are gormandizing on books. An examination of the volume of reading done by the young girls especially in the grammar and high schools in communities having access to free libraries will reveal astonishing conditions. Dr. Gilman has referred to the prevalent excess of reading as a national vice, and Mr. Howells thinks that "we are in danger of spoiling our literary digestion, and of becoming a nation of mental dyspeptics;" that "our excessive reading may be a vice or a mania; it is certainly a disease."

The second of these urgent problems is the alarming extent to which people, young and old, read without purpose, or at least without such purpose as brings any growth with the activity. An activity is educative in proportion as it is purposed, as it is determined by a particular end to be reached. The grave danger of mental, and possibly moral, dissipation by intemperate and motiveless reading is so well put by Mr. Vaile in a recent editorial that his warning should be read with care by teacher and librarian:

> The importance of motive in this reading and library problem is being overlooked. Librarians and teachers alike feel that if the boy or girl and the book are brought together the problem is solved. There is the mistake. The boy or the girl without genuine motive and earnest purpose, though surrounded with the most attractive books, is further away from the end which books and reading should accomplish than is the boy or girl with proper motive but without easy access to books. Motive is everything in this matter. In its absence, whether in the country or city, both books and reading habit are worthless or even worse.

It is urgent that school and library shall meet these problems intelligently and promptly, in order that the abundance of literature with which we are surrounding our youth shall not become a source of literary and intellectual dissipation.

LIBRARIES AND SCHOOLS; A TWO-FACED QUESTION

MISS EMMA J. FORDYCE, TEACHER OF PHYSICS AND CHEMISTRY,
HIGH SCHOOL, CEDAR RAPIDS, IA.

In this day of strenuous industrial competition there is great danger that our educational ideals shall be made too strongly industrial. There is no doubt that a large number of people in the United States think this impossible, for the reason that education could not, in their opinion, be too strongly industrial.

It is the old, old debate between the dreamer of dreams and the carrier of burdens. A two-faced question — one of silver, looking toward training, the other of gold, looking toward ideals. The future must make this a composite face, looking toward the highest good. It must embody what truth there is in the motto, "Teach a child only those things by which he may earn his own living," and the altruist's plea, "Give a child ideals and he'll earn his living."

Neither is wholly right; neither wholly wrong. No one doubts that the education of the past has not trained the trinity, heart, hand, head, as it should; but let us hope the future does not hold as the motto of any school, "The training of the hand makes the perfect man." Time must teach us the wise balance.

The pressing question of the moment is, how are the dreams, the strivings, the achievements of the past, as stored in books, to be made the heritage of the child of the public school?

It is not necessary to argue with such an audience as this that the soul that goes thru this world carrying the burden of labor without the help of any book must be a weary one indeed before the journey's end. Nor will the soul who listens to the books, but carries no burden for others, be less weary.

How shall the voice of the book in stately verse, in heroic prose, in gentle pleading, in inspiring song, in the tale of the Divine love that gathers the world to its heart, be made audible to the child who leaves home and nature, with her green fields and blue skies, to stay within grim walls to learn of life?

We take it for granted that all are agreed that literature is to be a most potent help to life, a revealer of it; that all believe that no more "practical" thing can be done for a child than to give him the keys of the storehouses of the best friendships of the best men and the greatest men of all the world — the ideals and strivings of the ages.

Two things every soul that ever lived in this world has longed to do: To fashion with his hands tangible things, or images of them, and to know what is the mind of the soul akin to his. Technical training, in its broadest sense, does one; the library, properly used, does the other.

A look into the past of the republic's school life shows a most grievous neglect of literature as an ally to educational life, and a glance at the present shows signs of awakening to its vast value and force. Chicago reads "Macbeth" with its fifth-grade children, and Boston Robert Browning with her seventh grades. In most schools some sort of literature work is essayed.

Every thoughtful superintendent tries many plans to overcome the difficulties incident to the slender endowment of material and the poor training of men the past has given us. Class-room work on standard authors by magnetic teachers cannot have its value overestimated; yet, no one knows better than this same magnetic and earnest teacher how dangerously inadequate it is. She knows that the key to the literature storehouse is not given when the ability to read is acquired if the child is left to the tender mercies of chance print. The republic has already suffered much from such work, and will suffer until the priceless heritage of not only how to read, but what to read and when to read, shall also be entered upon.

Each soul chooses its books when it has opportunity, by its inner ideals. No set and unbreakable law can be made. Yet within certain limits people of certain temperament, condition, and ages will choose. In the near future each teacher must know these limits, and will be required to do so quite as matter-of-course as she is now required to know certain arithmetic and geography. The training schools will supply such teachers, and the public libraries supply the books.

As our new schoolhouses are built let an outer room, easy of access from school and street, be arranged as reading-room and library, open to pupils and parents alike. Let the books be supplied from the public library and be in charge of a teacher-librarian, one who has had training and experience both as teacher and librarian. She shall assist teachers and pupils, and be responsible for as wide circulation of the books as possible before they are returned to be exchanged for others at the parent library. Let the neighborhood understand that they are thoroly welcome, and will have someone who understands their wants to serve them. People who could not find time to go to the public library could go to the school library, and parent and child could read and enjoy together.

The fact that there are not many teacher-librarians will disappear when it is once understood that such people are needed. Teacher and teacher-librarian together shall plan and tempt the stirring, glowing, eager soul of the child with the information, the story, the song, the dream, the inspiring thing that shall make that child soul take step after step upward—shall put into its reach what will whisper such beauty of doing and being as shall stir the soul to endeavor beyond the happiest dreaming. When the child's school life is finished, early or late, in his heart shall be that which shall forever make impossible complete surrender to the selfish or base, and shall make him for life the friend of that which shall help him to bear, to strive, to achieve, as his living friends are doing and his book friends have done.

Is life so easy that we shall say books are a luxury and for only the leisurely classes? Is it worth while to take into enchanted lands the soul that shall toil and lose? Shall the best that all of the ages have brought us lie beyond the ken of the child of the public school, while he is given only the ability that any decent horse has to earn his own living? Or shall the public school take unto itself this great and beneficial ally, the public library, and together work out the problem of how literature shall be given opportunity to lend her healing and enchanting touch to one to be "oft sore wounded" — the child?

Action should be instant and wise. Let us realize that a nation with only material ideals is a weak nation indeed; but that one strong in material resources, high in home, civic, and spiritual ideals is to rule the world, and we should be that nation.

Says some practical soul: "This sounds well, but what good has really been done by your library?"

Let Billy answer: Poor, homeless, neglected, active Billy, with his ideals so hopelessly upside down that to be arrested more times by the policeman than any other boy is his most coveted distinction; Billy who "sassed" the long-suffering city librarian, humiliated the library board, disgusted the reading patrons, scorned the teachings and attendance of the public schools except upon some particularly exciting occasion; who worshiped the beautiful young assistant from afar and worried her life out when near; who said, "Aw, them fellers in books don't do nothing!" But Billy reckoned without realizing, for the deeply earnest city librarian and the tired teacher turned into Billy's darkened soul the light of books. One after another, carefully, cautiously, vigilantly, they tried them, until the slumbering forces of good stirred, and Billy grew a little less obnoxious, a little nearer the common courtesies of life, a little nearer life itself, day by day as the books led him into lands of which he had never dreamed.

Such service should school and library do for every child that crosses the portals of our great public schools.

GREETING FROM THE AMERICAN LIBRARY ASSOCIATION

ANDERSON H. HOPKINS, ASSISTANT LIBRARIAN JOHN CRERAR LIBRARY, CHICAGO, ILL.

It has now been several months since I was named to be the official representative of the American Library Association at this meeting. If it had been known at that time what would be the action of the American

Library Association at its election less than a month ago, you might have been spared this infliction and I some natural embarrassment at the situation in which I find myself. Three weeks ago, in general conference assembled, Dr. James K. Hosmer, librarian of the Minneapolis Public Library, was elected president, and Dr. James H. Canfield, librarian of Columbia University Library, and president of that department of the National Educational Association which I now address, was elected first vice-president. Surely my services as official representative cannot be sorely needed under such circumstances; but I had in good faith engaged to act, and here I am in good faith acting.

I bring you greeting, joyous, earnest, and real. It is no empty word I bring. Spontaneity is the keynote, and its harmony with that same tonic of all that is best in our educational world is perfect and complete.

Three weeks ago, in Boston, and at that beautiful spot beside the sea named for its choicest plant, Magnolia, were gathered a thousand earnest men and women. They are the patrons, I fear it might almost be said the devotees, of the printed book. Their cry was, educate, educate, educate! And their query was, how, how, how? Today are gathered here, shall I say, eight thousand earnest men and women, and as their united voices reach my ear I hear them intone the same cry: Educate, educate, educate! followed by the same earnest query: How, how, how? To the voice of this throng I would fain join mine. But when the cry has sounded and resounded, followed by its persistent query, I would add another question: Why, why, why are we not working together? Is not our quest the same? Are we not seeking the same light? Why do we stagger on alone? Why do we not join hands to support each the other?

Would that I might answer this last query in a straightforward manner, without offense; but that may not be. The utmost that I can hope to do is to suggest one or two possible causes for the slowness in growth of this co-operation between teacher and librarian, a joining of forces and of interests which, on the face of things, is so much to be desired. We know that each is busy with the details and small perplexities of his own particular office. Let me submit that a prime fault is that he is overbusy with these and fails to look about him, thus breeding an insularity that reminds one of Lowell's characterization of a certain condescension in foreigners.

It must not be forgotten that truth is many-sided. It is well sometimes to establish one's seat so close to truth itself that the human eye can see but one of its infinitude of faces; but it must be remembered that, before the whole of truth can be seen, the human soul must recede as facet after facet comes into view until the magic of infinity is reached, the sign is changed, and new glories greet the eye on the other side.

We are too prone, you and I, too prone to be so bound up in our callings that we overlook the others, that we forget there are many other callings as important as our own, and that some of them are of quite as great force educationally and for the betterment of the world as ours. But, as I conceive it, there are not many that might be united to better advantage than ours. And now why does not this union come about more rapidly? Let me say—not in the way of fault finding or recrimination or reproach, but merely as pointing out—that it is more your fault than ours that our union is not closer. The organization of your institution is much older, more complete, and powerful than is that of ours. Indeed, while it is correct to say that the public school is an organized educational force, it is not correct to make the same statement concerning the public library. It is not organized at all as an educational force, except by that voluntary association which is so great a thing indeed; but it is not sufficient. We now have before us the curious sight of two great educational movements in action. Yours, the stronger, serves directly the individual thru a small number of years. Ours, the weaker, serves directly the individual thru almost the whole of his life period. The weaker stands facing the stronger at this moment with outstretched hands and ready will. The stronger looks impassively on. If this seems abstract to you, let me cite a concrete instance: There are many departments in the National Educational Association, and among them is one called the "Library Department." There are librarians not engaged in the profession of teaching who attend its sessions and transact much of its business. There are many sections in the American Library Association. These sections are to the American Library Association what the departments are to the National Educational Association, but among them no teachers' section is to be found. And in my experience as a member of the American Library Association I do not remember to have met at its meetings any teachers who were not engaged in library work professionally. By what initiative was the Library Department of the National Educational Association inaugurated; by that of teachers or of librarians? If a teachers' section of the American Library Association comes into existence, by whose activities will it be created; that of teachers or of librarians? And if it does not come into existence, why not?

In a state which shall not be named, but which has a large and elaborately organized teachers' association, and also a smaller and perhaps less elaborately organized library association, an attempt was made some years ago to organize a library section in the teachers' association. I cannot and do not wish to recount the circumstances. It will be sufficient to say that the attempt all but failed because of the insistence by the larger association that the smaller should sink and lose its identity in the formation of a section of the larger. The section was formed, but it has never yet drawn the breath of life.

These are melancholy things. I do not like to say them, and do not say them because of any liking or disliking, but because I believe they ought to be said—and said to you.

In a brief talk with Dr. G. Stanley Hall, at the meeting of the Department of Superintendence in Chicago last winter, in reply to my question about the possibility of a closer organic relation between schools and libraries, he stated it as his opinion that such a relation ought to exist, but that no one yet seemed to have suggested an effective plan. But a plan seems lying already at hand waiting to be used. The school has a well-developed organization thru its central bureaus, beginning with the bureau of education at the seat of federal government and extending down to the community thru these successive steps: the state superintendent of public instruction, the county superintendent, the township trustee, the district school-teacher. These are linked together, forming a fairly compact organization. Now the public library is following the same historic road in its development, and the signs are already clear in the sky heralding the approach of the first two of these central bureaus. Are we—you and I—to sleep the time away and let these two educational forces parallel each other with separate organizations for the same purpose, or shall we join hands and stand together?

The people are ready and waiting for these economic combinations in the educational world as well as in the realm of commerce.

Consider for a moment the clumsy processes thru which we must go to produce a printed page from the spoken words. Think for a moment of the strength which has been expended in this Association in the hope that a simplified English spelling may be secured; and then remember that only a single short step remains to be taken by some patient mechanical genius, and with a little time all this difficulty melts away like the mist of early dawn. Let me make more clear what I mean. We have now certain symbols by which is translated to the eye the thought that is translated to the ear by the spoken word. We have now machines in plenty by which the spoken word is received, translated into, and recorded in symbols natural to it, but to which our eyes are unaccustomed. There remains but a single step, namely, to discover the selective principle whereby the one symbol is mechanically translated into the other symbol and the problem is solved. When this mechanical step has been taken, as it will be, the writer may sit at his desk and dictate his thought to the machine—not a human machine—at his side, and behold it faithfully reproduce in type his blunders as well as his accuracies. Then, and not till then, will our spelling become simplified and our speech no longer slovenly.

If this great change may be wrought by one so short step in the mechanical world, what may be wrought in the educational world by the longer steps that lie squarely before us in our pathway? The world is waiting, waiting. Shall we doze the time away? Or shall we join hands and take the forward steps together?

DISCUSSION

Reuben Post Halleck. — It has seemed to me that most teachers, in their anxiety to master the details of definite subjects, have overlooked the life which might be imparted to their instruction by the literature of these subjects, and it is almost an indisputable fact that many otherwise good teachers are woefully lacking in their knowledge of books in general, and particularly those which may be called the great books, and even the great characters of history and literature are unknown to teachers who would be helped by a closer acquaintance with them. There is a great need for more information on the part of the teachers about great people and great books.

J. I. Wyer, Jr.—Librarians have early recognized the trend away from restrictions in libraries. Age limits, guarantors, strict rules, and many other restrictions tending to keep children at a distance from libraries, are in many cases abolished. The greatest stress is now laid on making easier of access to pupils the books in the library relating to their work.

O. H. Bakeless. — In my experience with libraries it seems to me that of all the people who come to the public library the most to be dreaded are the teachers. They have a secret contempt for the librarian, and this contempt is expressed in such ways as to make the teacher a dread to the librarian.

A. H. Hopkins. — It is easy to find some schools and some libraries to which sharp criticisms may be applied, but we must beware of drawing too hasty conclusions from single instances. To be sure, such criticism may perhaps be profitably indulged in here, but it is after all not the kind of thing we are striving after. The thing that gives you your effective working force is your effective organization, and it is that same thing we are seeking. You are so much stronger than we that you should be helpful to us.

WHAT THE SCHOOL MAY PROPERLY DEMAND OF THE LIBRARY

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This is a thorny subject, that needs to be handled with circumspection. "Demand" is an arrogant word, and implies a threat, supported by a display of violence or force in such an amount as to compel acquiescence, provoke a combat, or to bring about a state of haughty, but dignified, silence. For the sake of perspicuity, as well as fair dealing to both parties involved in this connection, the proposition will also be so stated that it faces both ways, namely, what the school may properly demand of the library, and what the library may properly demand of the school.

It is a law of the more advanced mathamatical sciences that when one variable depends upon another variable, so that any change in the one produces a corresponding change in the other, they are said to be functionally related, or that one of these variables is a function of the other. Under a contrary supposition of absolute independence, each variable, whether human or mathematical, must be treated as unrelated to another so far as this special investigation is concerned. Granting this assumption, it is the province of this paper to point out, in a rough sort of way, what kind of functional relations ought to subsist between these two independent variables—the librarian and the school-teacher—to emphasize this relationship and to suggest a tentative working basis. The writer fully appreciates the magnitude and the difficulty of the task, and he recognizes that a layman should speak cautiously upon a subject that has been so generally evaded in discussions hitherto. Under such strained relations, it may be assumed that neither interested party will be anxious to reveal critically and in a cold-blooded fashion the poverty of his own mind in the presence of the other, whom he may regard with a degree of suspicion. This assertion is based solely upon the belief that when each is working behind cover, and not in the open, and endeavoring to conceal rather than to reveal defects, it is diffcult to get at the facts. Such being the case, there are two alternatives: that of abstention or a frank conversation covering the situation. The latter method of procedure with reasonable people will usually result in a satisfactory agreement. Progress cannot be assured to the pupils unless the teacher and the librarian work harmoniously at every point along the line. Slipping cogs in the mental machinery of either is hazardous, jerky, unsatisfactory.

If the ideas of the librarian and of the teacher be concurrent as to what boys and girls should read, or if their ideas should run in the same general direction, without considering by whom they were first set in motion, it greatly simplifies the situation, facilitates the work, and would probably require only a few preliminary observations to dispose of the subject. Unfortunately such is not the case, and it does not appear, judging from present indications, that these functionaries as distinct classes will come to a hearty agreement at an early date. Too often each appears to be officially supersensitive of his own worth, importance, and dignity for the benefit of the children. The writer believes that each ought to take his readings from the same mental level and read forward and backward.

To get a better idea how these states of mind have been produced, let us get back into the intellectual workshops of these purveyors of public intelligence, and examine the motives of each, and determine whether it be possible to find a common ground upon which they may stand so that their thoughts will flow in the same channel and that they may work for the accomplishment of the same object. It is conscientiously believed by a large number of librarians that only a few teachers are well read, and consequently that a very large majority read little that is useful or stimulating. On the other hand many teachers feel that librarians are a pedantic, captious, fault-finding clique, who take special delight in pointing out how little teachers really know, and in exaggerating their eccentricities, and judging them as a class by a few erratic teaching freaks.

There is some truth and much error in both positions. It is a lamentable fact, however, that a vast majority of teachers do not continue to improve in knowledge after leaving school, and few keep fully abreast in the subjects they studied in high school or college, or even enter a new field of intellectual activity after graduation. Perhaps most teachers are no more dilatory in this respect than other graduates engaged in different vocations. Ordinary human nature is a weak affair at best, and much of it is satisfied to get along with as little exertion and serious thinking and reading as is possible in order to retain an air of "learned respectibility," while only a few rise to loftier heights and continually strive to enlarge the boundaries of knowledge or add to their stock of information. Most are guided by a species of deceptive reasoning, and are content to reject the law of continuous growth and to accept instead that of diminishing intellectual returns; and upon this hypothesis it is easy to account for the non-progressive and the retrograde condition of so many teachers. The few earnest men and women that are influenced by higher and nobler purposes should not be confounded with the everlasting sons and daughters of rest. Let us keep these classes apart in thinking on this subject; but it is indisputable that in all grades of schools, from the lowest to the very highest, there are those who get into positions and just manage to hold on without having hardly a new intellectual mental sensation once a year; and if one strong sensation should get in by accident it would produce a Mount Pelee shock in the brain centers; and were the facts correctly reported from all parts of the country, the assertion would be fully substantiated. That it is so is not an obscure question when one considers that of the large majority of the teaching force of the nation only a few have been qualified for the work, while the vast body follow low educational ideals. Keen, sharp-witted men and women in the libraries soon become acquainted with the men and women in every community who are intelligent and strong readers. A microscope is not needed to find them; neither does it require a lifetime for one in such a position to find out one's mental characteristics. What one reads himself or recommends children or young people to read is a good index to one's literary taste. It is perfectly natural for the librarian to judge of the literary tastes of the recommendors and the width and depth of their attainments. Literary judgments are common in all other professions, and that of the librarian is no exception.

Richly endowed and noble minds are so constituted that they naturally seek contact with those of a still higher and more solid order, while those of meager attainments, if suspicious and narrow, frequently avoid everything of a disquieting nature or that would expose mental deficiencies. Librarians as a class, however, are more willing to help teachers promote the welfare of school children than the teachers are to work in conjunction with librarians. Each class looks at the matter differently, yet librarians put themselves to great inconvenience in assisting teachers and pupils to become better acquainted with books bearing on certain subjects, and by their kindly sympathy and excellent advice they do much for the children, and lighten the work of the teachers; but their best-intentioned efforts are not always crowned with success. Not mutually understanding each other, they work at cross-purposes.

The influence of books.—Books in some strange manner are regarded as sacred things, and confusion may also arise from the fact that a pupil is directed to pick out information from a heterogeneous collection of authors, all strange to him. In his text-books he knows where to find much of what he wants, but in the library the multiplicity of authors confuses rather than clears up any one point. Young people do little in the way of generalizing. They work with individual and simple conditions at first and for a long time; hence, instead of general and widespreading questions being given to them to investigate, they should be taught how to concentrate their efforts on specific and well-authenticated instances. In a literary sense, it is always better for a reader to get a bird's-eye view of the present state of a subject or science rather than to spend a great deal of time in finding out what has been written in all the past, beginning with myths and folklore, and probably at the end of a lifetime getting down to the close of the eighteenth century or the beginning of the nineteenth. Encyclopedic knowledge should not be exacted of immature minds.

A delicate point.—Another matter of rare occurrence is that a teacher from his desk in school recommends books that only a few persons ever read—and never in the sitting-room or parlor—and the boys and girls in the high school come to the library and insist that the books be handed out, because the teacher had recommended them. Under the circumstances the mild protest of the librarian is not understood, and if he insinuates that it is not pious Sunday-school literature, the announcement at the school produces an upsetting of the teacher's equilibrium that is not reassuring to the pupils. The breach is widened, the teacher feels chagrined, humiliated, and oftentimes is offended. Had the teacher consulted the librarian beforehand, such incidents would not occur. A case in point: Once I knew a well-meaning teacher to recommend a class of boys and girls to read "Selections from Leaves of Grass." That teacher did not know from personal knowledge that Walt Whitman used all the leaves in the forest in most of his poems except "fig leaves." It is perfectly plain to everyone that books of doubtful propriety should never be recommended to high-school pupils to read, much less to grade pupils. The librarian is a far safer guide in all such matters than teachers who get their information thru round-about channels, or thru traditional sources. There is only one sure test of a book's value to the reader, and that is, in what condition does it leave the mind after reading it?

Duplicating books.—Library books should be duplicated to satisfy the demand made by pupils for books bearing on certain lines of work—not in the nature of text-books, but for collateral reading. Should a pupil wish to investigate a particular line of library work in order to make a report to his class, and he wants to consult the best authorities, he should apply to the librarian for supplementary reading. It would always expedite matters if the teacher would send word a day or two in advance to the librarian when pupils are expected to consult library books, in order that the books may be selected and put on tables in the consultation room ready for use, and an attendant is there in charge to give proper directions to the class.

A personal experience.—A strange, inexplicable feeling is always produced on my mind when I first enter a large library. I feel my own poverty and ignorance in such a presence. The first time I went into a large library was in St. Louis. There the books stood in rows on shelves. Their titles I did not know. Each volume to me represented some important truths, and it was valuable for some purpose. I felt my utter helplessness, was bewildered, dumfounded. I wanted to stay there and read always, yet I knew no one. Perhaps it is only certain sensitive natures that are impressed in this manner, yet it is my belief that there are many such who look for and feel the need of guidance in the presence of all earthly greatness.

Sending high-school pupils to the library.— For one to search for what he wants in a blind sort of way, groping, as it were, in the dark, without any light to guide him except the injunction to "hunt and he will be rewarded," is not far from adding insult to injury. An experienced hunter by reason of his knowledge of landmarks can thread his way over rugged mountains, or across wide expanses of prairie; but the unskilled in bibliography is simply a wanderer in a strange land without a single mark to guide him. He is a feeler in Egyptian darkness.

But the question of how to make pupils feel at home in the library when they first begin to go there to consult books is one that is far reaching for attraction or repulsion. Having thought over this subject considerably, the writer is clearly of the opinion that one of the most successful ways of removing these confused mental states is for the teacher to take up a library catalog in the recitation room and to have the pupils study it and become familiar with the simpler methods of classifying books. This should be the first preliminary instruction given in the line of reading, outside of pupils' text-books, and not from a selected list of books made up from a teacher's list or some other ideal collection. Then when the pupils go to the library, mutually confidential relations should be established between the teacher and the librarian, so as to avoid friction at every point. This presupposes on the part of the teacher a tolerable familiarity with the resources of the library, and at least a general knowledge of what the library contains along special lines in which the teacher or pupils may be interested. This is not a violent presumption.

Too often the teacher knows nothing or next to nothing of what the library contains, and in consequence of this defective information the pupils blunder along in search of information. The pupils, when directed by the teacher to go to the library to examine a particular book, should be directed to get information on that particular subject. In this way they will get the best the library contains. Owing to a misconception of the real function of the library and its resources, the pupil is frequently placed at a disadvantage, and he becomes disgusted with the entire management, and leaves the library with a feeling of bitter disappointment. Thus antagonism is often engendered when it could have been avoided by using a little tact at first. First impressions are usually the most lasting.

Ward-school pupils and the library.—I purpose giving somewhat more explicit directions in regard to ward-school pupils who go to a place where books are kept in an orderly manner. To study printed catalogs and systems of classification, to examine books on the shelves in the most superficial manner, will foster a sort of literary atmosphere, oftener of deeper impression than mere book talk. The innumerable questions and conundrums that school boys and girls are called upon to find out is another way of familiarizing them with library books. It is a hopeful sign. In rummaging over so many pages and thru so many books some real knowledge is gained, a mere habit, perhaps, and yet it is certainly a great thing to know where information may be found. When pupils first go to the library they should be introduced to the librarian or assistant librarian, who ought to welcome them with a firm grasp of the hand and with a few words of sympathy. Upon their arrival the librarian would do well to take them thru the library and give them a few brief explanations, and soon they will reach the fact that knowledge is somewhat arbitrarily mapped off into departments, and it helps to bring order out of confusion for the young to grasp this idea early in life; and later, when one starts out to find a bit of information, he has some vague notion, at least, of the direction in which he must look. Not only young people, but many of mature years and of considerable experience, wander into a library looking around in an aimless sort of way. They see too much and too little. There should be no artificial or natural barriers imposed between children and the reservoirs of knowledge. The gateways should be wide open. Of course the best way to have ward-school children visit the library is in company with their teachers; or, if this be impracticable, the teacher should give them a letter of introduction to the librarian or assistant, stating each pupil's name, address, school, and the object of their visit. Thus they are able to feel at home at the outset, and they will gladly return at the first opportunity. Little children trained in this way soon feel as much at home in the library as elsewhere, and if the bond of sympathy is once established between a child and the librarian or the assistant, then the child knows that he can go in all confidence and ask for what he wants, and that he will be sure to get it if it is to be had. Women librarians succeed usually much better than men in directing children's reading.

Supplementary reading and juvenile lists.— In regard to supplementary reading, it is not the function of the library to furnish it to the pupils in the grades or in the high schools, but rather that it should be supplied to each school as other supplies are furnished —by the board of education — or by some other agency devised by the school for that purpose.

On general principles I am opposed to all "juvenile book lists" that are dished up for children to read, altho I admit freely the disinterested motives for making such lists. Reading is an individual affair, and is a retail business at that. Children do not select such books when left to themselves, altho they may read a few profitably. Boys prefer books of action, strong and vigorous. Girls will be interested in those chiefly of a less exciting character, perhaps with a considerable admixture of poetry. Hashed victuals, especially literary hash, should be taken by goats rather than fed to children.

Literary examinations.— For years I have been fully convinced that all grade and high-school teachers, as well as principals and city and town superintendents, should be required to pass an examination in current standard literature, and this examination should be chiefly oral, and embrace at least three hours in questioning and exchanging opinions by the applicant and examiner. This would afford an opportunity to reach out in several directions and to test the applicant's knowledge of books in general, and to ascertain how well he had read, and whether he had his knowledge well in hand. A friendly conversation covering two or three hours would be far preferable to a set of written replies to a few specific questions; but the written examination would indicate the quality of scholarship versus the quantity. Each method has its value.

Courtesy of librarians.— Some years ago I was engaged in preparing a bibliography of American arithmetics, and I visited personally a large number of libraries in all sections of the country, and everywhere I went the librarians and assistants showed me every courtesy by putting all the treatises in each library before me on tables in reference rooms, or they took me to the shelves where I could inspect each book.

In conclusion — I have endeavored to point out in a spirit of kindness the differences that sometimes exist between teachers and librarians, and to show how a better understanding may be established on a permanent basis of good feeling, and how the pupils can be made to feel at ease and self-poised in a library, believing that "it is the office of discrimination to detect errors, but of good nature to excuse them."

DISCUSSION

R. H. EMBERSON.—I cannot agree with Mr. Greenwood that teachers do not read. They read a great deal, but they do not read to advantage, or with any system. It is more like browsing than studying. I would emphasize heartily the point that the best results come from the hearty and constant co-operation of teacher and librarian.

MAY H. PRENTICE.—Dr. Greenwood's paper did not exactly tell us what the schools should demand from the library, but rather the reverse. Are not librarians doing more for schools than they are ready for? I am rather of the opinion that book lists *are* a help. Children *do* use them to choose from. It is not so much the teacher's business as the librarian's to concern herself intimately with what the children are reading. The teacher's efforts should be directed more toward sympathetic, thoro work in the schoolroom. Don't teachers read as much as other professionals, even if not as much as they should?

DR. GREENWOOD.—I do not mean that teachers do not read something, but that they do not read the great books. Juvenile book lists without sympathetic and earnest help from teacher and librarian are of no use.

A. H. HOPKINS.—We do not blame the teacher because she does not read more; perhaps she cannot. The thing we do blame the teacher for is that she will not or does not join hands with the librarian in helping the children to read to better advantage.

SCHOOL LIBRARIES IN THE RURAL DISTRICTS

MISS AGNES ROBERTSON, COUNTY SUPERINTENDENT OF SCHOOLS, CHEROKEE, IA.

"The Public Library," says Mr. Melvil Dewey, "forms one side of a grand trinity as a means of public advancement—the library, the school, and the church; its base, the public school; the church, with its moral teachings and care for the spiritual man, forms one of the sides; the public library forms the other, by its broad and general training of all classes and sects."

The late Matthew Arnold, in one of his lecturing visits to this country, said that he saw nothing in America that impressed him so much as the sight of a ragged and almost shoeless little boy sitting in the reading room of one of our public libraries, studying his book or newspaper with all the *sang froid* of a member of a West End London club.

The growth of the public library movement has been phenomenal during the last century. One hunderd years ago public libraries were almost unknown. Prior to 1810 there were but ten in existence, and these were chiefly subscription and society libraries collected and used by those who were able to pay for the privilege.

To America belongs the honor of founding and perfecting the free library system, which reaches all classes of people, carrying light and happiness into homes lofty and lowly, into jails and prisons and reformatories, opening its doors to the dwellers of the slums, leading them into purer avenues of thought and feeling; fitting all for better citizens in this great commonwealth of ours.

The first movement toward a free public library was made by a citizen of New Lebanon, N. Y., so that to New York state is due the honor of instituting the real initiatory movement. This was in 1817, when, according to a writer in *The Nation*, Dr. Jesse Torry published a pamphlet on the subject, bearing the somewhat high-sounding title of *The Intellectual Torch*, purporting to develop "an original, economical, and expeditious plan for the universal dissemination of knowledge and virtue by means of a free public library." He urged the legislatures, both national and state, to establish public schools and judiciously selected public libraries in every part of the republic.

The matter was a subject of much discussion and many fruitless efforts for years, until in 1835 a law was passed by the state legislature of New York which permitted the voters in many school districts to levy a tax of $20 to begin a library, and a tax of $10 each succeeding year to provide for its increase. Later, other laws were passed, but for various reasons the work was not wholly a success. Interest declined, books were scattered and lost, and ultimately the libraries were almost entirely unused. This was chiefly because of the poor selection on the part of the committees and unbusinesslike methods on the part of the librarians.

Massachusetts, under the leadership of Horace Mann, also early took up the work, and other states rapidly followed the good example, until today libraries are as common as public schools, and there is no town or village of any consequence that cannot boast of one or more libraries. Even mining towns, which spring up within a single round of the moon, as soon as pockets are sufficiently well lined to warrant it, begin to clamor for some more solid intellectual food than that furnished by the daily paper.

It has been estimated that there are in the United States over 23,000 school libraries, containing 45,000,000 books, which is 12,000,000 more than are found in all the public libraries of Europe. This estimate was made several years ago. Probably today there would be found at least one book for every inhabitant of this country of an age to be able to read it.

But the library movement in the rural districts is of more recent date, especially in the West and Middle West and South. Many states are still without a law by which rural schools must be provided with books. The state superintendent of Illinois, in his biennial report for 1900, says there are in that state 5,000 schools without libraries. And the same is true of other states. Many districts have no reading matter aside from that found in the ordinary text-book. Under these circumstances, the best results cannot be obtained. It is said that the amount of reading matter in one set of ordinary school readers does not exceed that in one of

Dickens' novels. Just think of a boy or girl spending from six to eight years on one set of readers containing selections having no relation to each other, and selected without regard to the needs of the child's heart! It has been well said: "If a piece were cut from the canvas of a painting and given to us to admire, it would be no surprise if we found no beauty in it; nor should we expect the child to be interested in the middle of a story which has lost the pervading spirit of the whole." Such disconnected fragments cannot form a basis for future growth.

Right here the library fills a long-felt want; it is the link that binds the home and the school life. That it is necessary and desirable, even indispensable, is not to be questioned, for children so often leave school before they reach the stage of self-education. It has been estimated that four-fifths of the school children pass out into active life before reaching the high school; hence the importance of an early taste for reading being formed, which becomes a safeguard and lifelong means of education.

The methods of obtaining rural-school libraries vary with the needs of the district and the state laws governing expenditures of public money, each state making its own laws. In Iowa, a few years ago a law was passed providing for $25 being taken from the contingent fund each year for each school for the purchase of books and apparatus. Many counties did not take advantage of this law, and in 1900 another law was passed making it mandatory upon the treasurers of rural-school districts to withhold annually not less than five cents, nor more than fifteen cents, from the apportionment for every person of school age. The law has been in operation now two years, and the results are very satisfactory. Last year nearly $50,000 were expended out of the district funds for library books, and in addition to this $28,426 have been raised by voluntary efforts on the part of patrons, pupils, and teachers.

In Iowa, over 9,400 school districts have school libraries, containing 453,554 books; 110,815 were purchased during the past year. Minnesota, Wisconsin, and South Dakota have laws similar to the Iowa library law. In some states, if the districts have raised $20 each by subscription, the state gives the same sum, and $10 every year thereafter on the same conditions.

The rural-school library movement in Iowa, started some years ago by teachers, thru the influence of county superintendents, deciding that instead of giving cards to each pupil at the close of school, as had been the custom, they would give one or more books to the entire school, which would go toward starting a library. This system of itself is bound to build up a library slowly; but the wide-awake teacher soon thought of other ways of arousing an interest in this important work. Within the last two or three years, thru the munificence of a friend of the public schools, George W. Schee, of Primghar, Ia., the schools of about twenty counties in northwestern Iowa have received large sums of money to be expended for school libraries. Some counties received as high as $1,500. This money was given as prizes to the school raising a certain amount. The school in each county raising the largest amount was to receive a prize of $30 for books, and each school that raised $20 would receive $10 more. The money, aside from the gift, was raised principally by subscription, donation, entertainments, sociables, and in some instances by the work of the teachers and pupils in cleaning the schoolroom. Thru this stimulus it is safe to say that from 1,400 to 1,600 rural school districts have established libraries.

The influence of this movement extends beyond the schoolroom. It is a silent and powerful stimulus which is given by them to the cultivation of the community in which they stand, and will brighten many lives for years to come. Great improvements are now apparent in schoolrooms and surroundings; framed pictures, copies of masterpieces, adorn the walls, making the schoolroom more cheerful and attractive. Bookcases are now a part of every rural schoolroom. Boards have become more liberal in the purchase of maps, globes, and other necessary apparatus.

Some are apt to think rural life very dull and monotonous, but with access to a good library the young people in the country have all the advantages of their city brothers and sisters, without any of the disadvantages of city life. In a Farmer's Institute report we find the following:

> A man well along in years, living on a ranch in the West, one hundred miles from a railroad, and twenty miles from the nearest neighbor, was asked how he could endure such isolation and solitude. "I am not lonely," he replied. "Have I not nature all around and close to me everywhere? Besides, I have the best of company. Thoreau comes and talks to me of Waldon Pond and Boston, its environments and people; Burroughs and Audobon make trips with me to the mountains and the woods; Charles Dickens brings his friends and acquaintances to see me, and they have become my friends. When I feel the need of a change, I explore Africa with Livingstone or Stanley, or talk with George Kennan about the hardships of Siberia. The travelers from "The Wayside Inn" drop in and recite their tales to me anew; I have reserved seats for Shakespeare's plays for any night in the week. I awaken every morning to the matin-song service of the birds, and am never lonely. But I pity the poor fellows in the city who are crowded and hurried by people everywhere, and yet have no time to know any one, and who do not read any books.

If the reading of good books can have such an influence upon one life, why should not every boy and girl in our rural districts be surrounded with like privileges? No school district is too poor to buy a few good books. The library need not be large to begin with; in fact it is better to begin with a few books, and let the library grow as the books are needed.

After a library is begun, some system of arrangement and management must be adopted. A system of loaning and some elementary rules and records are almost necessary. The selection of books becomes a study, and it is an art which all teachers should cultivate. It should be kept in mind that the school library is to supply books which will interest and instruct the youthful mind, but not necessarily to furnish amusement. In states where the law requires books to be purchased from public funds, the books must be selected from lists prepared at the state department, but the responsibility of selecting books to be purchased with money raised by voluntary effort falls upon the teacher, with the assistance of the county superintendent.

Instruction upon simple library methods and the choice of books should be given in the county normal institutes and teachers' meetings. There are many useful lists of books which will help in making a selection, and even the best of them are to be had for almost nothing. The American Library Association has printed a select list of books for children, compiled by Miss Hewins, of Hartford Public Library. The Buffalo Public Library has issued a good graded list of books for children up to eighteen years of age. The *Bulletin of Bibliography*, No. 13, gives an excellent list of fairy stories. The report of the Committee on the Relation of Public Libraries to Public Schools is a most interesting, comprehensive, and practical list, and it does not include an undesirable volume. *McMurray's Special Methods in History and Literature*, and the *Elementary School Record*, of the Chicago University, contain good lists of books.

Every library should contain a good international dictionary and an encyclopedia. There should be history stories and biographies to supplement the history; books of travel to supplement the geography; and masterpieces in prose and poetry to supplement the reading.

The teacher should not only know the books contained in the library, but should also know his pupils and their need, and thus be able to guide him in the selection of books, rather than to let him select at random or from hearsay.

Pupils should be required to make a report of books read. I would suggest the following questions, which have been used with good results in some of our schools:

1. Name of book.
2. Name of author.
3. Name other books you have read by same author.
4. Write what you know about the author.
5. Character of book — history, biography, adventure, romance, science, etc.
6. Give a brief description of the book, locality, time, season, character, incidents, etc.
7. Which was the strongest character? Why? Which character did you like best? Why?
8. Did it pay you to read the book? How?
9. What class of books do you like best?
10. If given $5 with which to purchase books, what would you select?

To the teacher whose heart is in the work, a thousand ways of making the library useful will suggest themselves. Some of our teachers have organized reading clubs, which have proved very interesting and of great benefit to the members. An imaginary journey may be taken, or a noted character studied, and the pupils allowed to search the library for information. Often pupils whom it seemed impossible to interest in their regular school work have been the most active in the club work, and led to take a greater interest in their lessons..

A day may be appointed as "nature day," when the pupils shall report upon what they have observed on some particular branch of nature, and the books treating of this branch set aside for inspection and listing by them.

Many magazines and papers have now very worthy, and in some cases fine, reproductions of famous paintings, cathedrals, and noted people, and the children could be encouraged to preserve them for use in scrapbooks or portfolios to be kept in the library. Old numbers of children's magazines may be called in, sorted, and bound. *St. Nicholas*, *Harper's Young People*, and *Wide Awake*, form a library in themselves.

There is no greater blessing for a boy or a girl than a good library. The books lived in furnish ideals higher than their own and often than those of other homes. Parents also read the books brought home by the children, and are refined and elevated by their tone. One noble book may change a whole life—yes, many lives. How many boys have been influenced for good by *Tom Brown at Rugby!* How many girls have built their ideals of true womanhood on Miss Alcott's or Miss Whitney's stories of sweet girl life!

Mr. George Ticknor's idea of the library was that it should be as free as possible, and as attractive to all classes, especially for those whose tastes for reading were not yet formed. The habit of reading is the first and indispensable step. Once established, it is a recognized fact that readers go from the poorer to the better sort.

As a rule, children choose a better class of books than older persons. They are eager to learn about the world, and what the world has been doing all these years. Their eyes are wide open to the wonderland of science, which, in these days of vivid writing, is made a veritable home of fairies. Jean Andrews, with her stories *Mother Nature Told*, and *Ten Boys from Long Ago till Now*, Miss Morley, with her *Bee People*, Miss Buckley, with her *Fairy Land of Science*, and many other writers of the same character, make knowledge a rich mine they are eager to explore, and, what is better, the stories are quite as interesting to their elders as to them, as any really good child's book always is.

I cannot add more fitting closing words than by quoting from an address of Sidney Smith's delivered at the Royal Institute in London and which has been emblazoned on the walls of several of our public libraries:

> Therefore, when I say, in conducting your understanding, love knowledge with a great love, with a love coeval with life, what do I say but, love innocence; love purity; love that which, if you are rich, will sanctify the bland fortune which made you so, and teach men to call it justice; love that which, if you are poor, will make poverty respectable and forbid the proudest to mock at the meanness of your fortune; love that which will comfort you and open to you the kingdom of thought and all the boundless regions of conception? Therefore, if any young person has embarked his life in the pursuit of knowledge, let him not be daunted by her cheerless beginning, or by the difficulties hovering around her. Let him rather follow her as the angel that guards him and the genius of his life. She will bring him out at last into the light of day, and exhibit him to the world comprehensive in argument, strong in reasoning, paramount above his fellows in all his relations and offices of life.

DEPARTMENT OF SPECIAL EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 9, 1902

The department was called to order at 2:30 P. M., in the Hennepin Avenue Methodist church, with Dr. Alexander Graham Bell, president, in the chair.

A vocal solo by Mrs. Maud Ulmer Jones, accompanied by Miss Margaret Gilmore, introduced the regular program of the department.

Dr. C. M. Jordan, superintendent of schools, Minneapolis, Minn., delivered an address of welcome, which was responded to by the president, Dr. Alexander Graham Bell; Dr. Wm. T. Harris, United States Commissioner of Education; and Professor Augustus H. Kelley, Boston, Mass.

Upon motion of Dr. J. C. Gordon, of Jacksonville, Ill., the secretary was authorized and directed to send a telegram to the convention of Instructors of the Blind, in session at Raleigh, N. C., conveying greetings, with a cordial invitation to participate hereafter in the proceedings of the department.

A paper was read by Mr. F. W. Booth, editor of the *Association Review*, Mt. Airy, Philadelphia, on "The Lesson to be Learned by the General Teacher from Teaching Language to the Deaf."

Music—vocal solo, Mr. D. Alvin Davies.

Mr. James N. Tate, superintendent of the School for the Deaf, Faribault, Minn., read a paper on the subject, "What is Minnesota Doing for her Deaf Children?"

This was followed by a paper by Mr. B. P. Chapple, instructor in the School for the Blind, Faribault, Minn., on "What Minnesota is Doing for her Blind Children."

Dr. A. C. Rogers, superintendent of the School for the Feeble-Minded, Faribault, Minn., next addressed the department on "What Minnesota is Doing for the Feeble-Minded."

The president, upon motion of Professor W. D. Parker, state inspector of schools for the deaf, Madison, Wis., appointed the following Committee on Nominations:

W. D. Parker, Wisconsin.
A. C. Rogers, Minnesota.
J. C. Gordon, Illinois.
J. J. Dow, Minnesota.

Miss Cornelia D. Bingham, principal of the McCowen Oral School, Chicago, Ill., gave illustration of work of the pupils of the McCowen school with the pupils of the school present.

On account of the lateness of the hour and the brevity of the exercises just witnessed, it was decided to devote Thursday morning to the presentation of school work by the children of the McCowen school.

SPECIAL SESSION.—THURSDAY, JULY 10

A special session of the department was held on Thursday morning from 9:30 to 12 o'clock, during which time Miss Cornelia D. Bingham, principal, assisted by Misses Andrews, Cannon, Pearse, Taylor, and Freedman, gave an exhibition of school work with thirteen pupils of the McCowen Oral School, Chicago, Ill. The exercises covered four grades, from the kindergarten to the advanced work of the school.

SECOND SESSION.—FRIDAY, July 11

The department convened at 2 : 30 P. M., President Bell in the chair.

The president suggested that a committee on resolutions be appointed, and a motion in accordance with the suggestion was passed. The following named persons were appointed as the committee:

Dr. Joseph C. Gordon, Jacksonville, Ill.
Mr. J. J. Dow, Faribault, Minn.
Dr. A. C. Rogers, Faribault, Minn.
Miss Alice Damon, Mystic, Conn.
Miss Jennie C. Smith, Eau Claire, Wis.

Music — vocal solo, Miss Inez Adell Davis, accompanied by Miss Eulalie Chenevert.

The following telegram received from the vice-president of the department, Mr. Edward E. Allen, attending the convention of Instructors of the Blind, in session at Raleigh, N. C., was read:

Blind convention indorses report of Committee on Reorganization. Congratulations.

The president introduced Signor G. Ferreri, ex-vice-principal of the School for the Deaf at Siena, Italy, who addressed the department, giving his impressions of the work of the instruction of the deaf as carried on in American schools.

A paper on "The Organization of Associations of Parents of Deaf Children as an Aid to Schools," was read by Mrs. Helen M. Hefferan, president of the Illinois Mothers' Congress.

Discussion followed, participated in by Dr. Alexander Graham Bell, Professor W. D. Parker, state inspector of schools for the deaf, Madison, Wis., Senator J. D. Stout, of Wisconsin, and Miss Mary McCowen, supervising principal of the day schools for the deaf, Chicago, Ill.

The next paper presented was by Mr. James J. Dow, superintendent of the School for the Blind, Faribault, Minn., on "Necessary Evils."

This paper was discussed by Professor H. R. Sanford, of New York; Dr. Alexander Graham Bell, Professor W. D. Parker, Miss Jennie C. Smith, principal of the day school for the deaf, Eau Claire, Wis., and Mr. J. N. Tate, superintendent of the School for the Deaf, Faribault, Minn.

A paper by Miss Mary McCowen, supervising principal of the Chicago day schools for the deaf, on "A Comparison of Kindergarten Methods for the Deaf and the Hearing Child," was followed by exercises by the four grades present of the McCowen Oral School, Chicago, under direction of Miss Cornelia D. Bingham, principal, and her assistants.

BUSINESS MEETING

The department, at 5 : 30 o'clock Friday afternoon, at the close of the regular program, continued in session as a business meeting.

Professor W. D. Parker, chairman of the Committee on Nominations, presented the following report:

For *President*— Edward E. Allen, Overbrook, Pa.
For *Vice-President*— Mary McCowen, Chicago, Ill.
For *Secretary*— Miss Sarah Fuller, Boston, Mass.

Upon motion the report was accepted and the persons nominated were elected as officers for the ensuing year.

Dr. J. C. Gordon, chairman of the Committee on Resolutions, presented the following report:

1. *Resolved*, That this department approves of the action of the Board of Directors, changing the name and defining the scope of the department, and recommends the adoption of the report of the Committee upon reorganization, which is as follows:

a. The name of the department shall be, "Department of Special Education — Relating to Children Demanding Special Means of Instruction."

b. The object of this department shall be to bring persons engaged in the education of children requiring special methods of instruction into contact and affiliation with teachers in general, for the interchange of ideas for mutual benefit.

c. All communications shall be non-technical in character, for the purpose of securing an interchange of ideas between those engaged in general and those engaged in special education.

d. To secure from specialists papers of general interest for presentation to the general convention or its sections.

e. To secure from prominent educators the presentation of papers before this department.

f. All matters to be presented at any meeting shall be approved in advance by the Executive Committee.

2. WHEREAS, The usefulness of this department in its work calls for information and statistics gathered systematically from a large field, and

WHEREAS, It is desirable that this information be made available at the next meeting of the National Educational Association,

Resolved, That a committee be appointed and authorized to confer with the National Bureau of Education with a view to securing a compilation of existing statistics relative to children in the public schools who need special methods of instruction, and the gathering of more complete returns from the large cities of the United States.

3. *Resolved*, That the efforts of the school authorities of the city of Boston to provide special instruction in special classes for pupils whose mental development is impeded by such physical conditions as partial deafness, imperfect sight, etc., is worthy of commendation.

4. *Resolved*, That the graduation of persons deaf from birth or from early childhood with academic degrees from Harvard, Yale, Columbia, and the University of California, as well as from Gallaudet College for the Deaf, and of blind students from many colleges, is worthy of note by this body as an encouragement to high endeavor on the part of pupils and teachers alike.

5. *Resolved*, That the larger and freer use of written language and of speech from year to year by pupils in schools for the deaf is a progressive step worthy of note and of commendation.

6. *Resolved*, That day schools for young deaf children, with efficient teachers and competent supervision, should be encouraged, especially for such children as cannot be reached by institutions or boarding schools, which, with their manifold advantages, cannot cover the entire field in many states.

7. *Resolved*, That the thanks of this department be extended to Wm. T. Harris, LL.D., United States Commissioner of Education, and other prominent educators who have addressed this department; also to the local Committee on Arrangements and to the ladies and gentlemen taking part in the musical program; also to Miss Cornelia D. Bingham for the living exhibit from her school in Chicago, and to A. Graham Bell, LL D., our president, for invaluable services rendered to this department.

Upon motion the resolutions were adopted by the department as read.

In conformity with the second resolution the president appointed Mr. F. W. Booth, editor of the *Association Review*, to compile and gather statistics relative to children in the public schools who need special methods of instruction, to report at the next meeting of the National Educational Association.

Upon motion, the department adjourned.

Department headquarters were maintained thruout the sessions of the National Educational Association at Parlor 222, West Hotel.

An interesting and impressive exhibit of products of the industrial work carried on at the School for the Feeble-Minded, Faribault, Minn., was shown in the parlors of the Hennepin Avenue Methodist Church.

The occasion of a dinner given on the evening of Friday, July 11, at the West Hotel, to the members and friends of the department by Dr. and Mrs. Alexander Graham Bell, was rendered doubly enjoyable and memorable by the fact of its being the twenty-fifth anniversary of Dr. and Mrs. Bell's wedding day.

F. W. BOOTH, *Secretary*.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

ALEXANDER GRAHAM BELL, WASHINGTON, D. C.

[STENOGRAPHICALLY REPORTED]

We have arrived at an important and critical period in the history of the department. This department originated with the teachers of the deaf. The blind and feeble-minded had no part in the original plan; they were brought in as a concession. For many years teachers of the deaf had felt an isolation, and they had a feeling that they wanted to come into affiliation with other teachers of the country that they might gain something of value from them. But when, on their first application to the officials of the National Educational Association, they found that they could not be received as a department for the deaf, because all other special classes would ask to be likewise set off, others were included with us, and we were labeled with the name, "Deaf and Dumb, Blind, and Feeble-Minded." Thus we were constituted of incongruous elements, with little in common. Teachers of the deaf did not like these associations, nor did teachers of the other classes. They did not wish to be known as defectives, or classified by a defect. A number of names were proposed for the department, but none seemed to satisfy. Finally, at the Detroit meeting last summer, a committee was appointed consisting of the executive officers of the department, to reorganize the department and to make effort to have its name changed. This committee acted and it adopted the following platform:

1. The name of the department shall be: "Department of Special Education—Relating to Children Demanding Special Means of Instruction."
2. The object of the department shall be to bring persons engaged in the education of children requiring special methods of instruction into contact and affiliation with teachers in general for the interchange of ideas for mutual benefit.
3. All communications shall be non-technical in character for the purpose of securing an interchange of ideas between those engaged in general and those engaged in special education.
4. To secure from specialists papers of general interest for presentation to the general convention or its sections.
5. To secure from prominent educators the presentation of papers before this department.
6. All matters to be presented at any meeting shall be approved in advance by the executive committee.

At a meeting of the Board of Directors of the Association yesterday, the request for the change of the name of the department was presented, and it gives me pleasure to announce that the request was granted by unanimous vote. So we are now and will hereafter be known as the "Department of Special Education."

The special idea of the department is to secure an interchange of ideas. Heretofore our papers have been technical. Teachers of the deaf have written addressing themselves to teachers of the deaf, and the teachers of the blind to teachers of the blind, etc. But teachers of the deaf and blind and feeble-minded have their own conventions for all this. At this moment the teachers of the blind are having a convention, and our vice-president is now absent in attendance at that convention.

Now, we do not want at our meeting papers that may be presented by special teachers at their own conventions. The first object of the department is that our members may attend the meetings of other departments.

There is one special point on which we can all come together. A large number of pupils are in the public schools who have defective sight or hearing, or are backward. The number having defective hearing probably outnumbers the total deaf-mute population. These pupils are not deaf enough for special schools. What is done with them, or for them ? They are drifting along in the public schools, and teachers do not know what to do with them. Now cannot we, who teach the totally deaf, give you information who are teaching the partially deaf ? And the teachers of the blind and of the feeble-minded, can they not help teachers who have children in their schools who are partially blind, or who are backward ? This department should give special attention to these pupils.

The basal idea of this department is the interchanging of ideas between specialists and ordinary teachers. So when we listen we want men, not specialists like ourselves, but some great, broad men to come to look down upon our little fields, like Dr. Butler, and Dr. Harris, whom we have with us today. It used to be that schools for the deaf were shut off from all affiliation with other schools, but now we are graduating our pupils into the public schools. Columbia College, New York, has the distinction of having graduated the first congenital deaf student. And now, at the last commencement, Harvard University graduates three deaf men. These men received their preparatory training at the Horace Mann School for the Deaf, Boston, and the Clarke School for the Deaf, Northampton. We are progressing in these matters, and the line of progress is for affiliation between special schools and their work with the ordinary educational system. There is no limit to which the blind cannot aspire, and it is beginning to be so with the deaf, and with the deaf-blind, as witness the case of Helen Keller, both deaf and blind, and yet now successfully pursuing a college course among the hearing and seeing.

RESPONSES TO THE ADDRESS OF WELCOME AT THE OPENING SESSION

DR. WM. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION

[STENOGRAPHICALLY REPORTED]

It seems to me that this meeting will be considered an epoch, not only to the teachers of the deaf, of the blind, and of the feeble-minded, but to teachers of all other classes of children. I enter heartily into Dr. Bell's plan by which mutual benefit will result to special and general teachers alike. The special teacher focuses his mind on special difficulties; then invents methods and devices by which the difficulties are removed; then he gives papers relating to these devices and general teachers learn for their own uses.

There are various defects over which we must lift our pupils; if they are not attended to, the children become morose and disheartened. What a stream of reforms will come in the methods of special education thru the meetings of this department and thru hearing your papers! A visit to a School for the Feeble-Minded in Lincoln, that I once made, was worth more to me than much that was gained from normal study of normal children. The will power is a necessary factor in developing the intellect, and the feeble-minded child is especially lacking in will power. He is trained upon the line of his lack. Control of the will is the first step; this taken, other steps may be taken in education.

The German poet gives answer to the query, what makes life worth living? "Life is worth living if you can only do something by which you make others better." This body, by specializing, will systematize the matter of lifting defective children over the thresholds of difficulty. Then by detailing their methods to general teachers, they multiply twenty-fold, and more, the great benefits they confer.

PROF. A. H. KELLEY, BOSTON, MASS.

[STENOGRAPHICALLY REPORTED]

I remember with what delight I listened to Dr. Bell at the Horace Mann School, where the product of the work is the same as in our fields in a different way. I am asked to speak of Helen Keller, but about all that could be said of her has been said by Dr. Bell in speaking of her and of the three young deaf graduates of Harvard. The work being done by special classes is in line with what you are proposing in this department. In my district in Boston I have one of these special classes, and we have adopted the name of your department. We have in fact three of these classes. Why not more? It is exceedingly difficult to secure just the right kind of teachers to lift these children over the threshold of difficulty of which Dr. Harris speaks. Our method is to visit—with the teacher—the homes of parents. I picked up little Harry S., nine or ten years of age, ragged and out at the toes. I turned him over to one of our bright, sympathetic teachers. I took her to his home and found a younger brother even more defective. We took Harry and the little brother away from home, to Waverly, where they are being cared for and trained. But these children, when in the same classes with other children, are the stumbling-blocks of the class. We must develop the motor power of the brain before the other powers. A boy as long as his teacher sat by could do anything he was asked, but without the teacher he would do nothing. We brought in the manual-training bench, the saw, the plane, etc. At once the boy was happy. Something was brought into his life that meant happiness.

I believe this is one of the grandest movements that has been started, and Dr. Bell's name will be handed down as one who has done much to bring into these darkened lives light and new power and new life. Dr. Bell has asked the question if we have statistics as to the proportion of pupils that have defective powers. To a certain extent they have been collected, but not to such an extent as to give definite facts. But the start has been made. With sixty pupils in a room, in order to do good work they ought to be pretty much alike. If we could only get classes down to normal size, the work could be more specialized. We have made request of teachers that they send us names of all pupils considered as defective. Upon these cases being investigated, some are found not seriously defective; others are segregated. What effect has such an inquiry upon parents, I am asked? We get around that by adopting the name "special school," "special teacher," the latter specially qualified, avoiding the name "feeble-minded" in any connection.

LESSONS TO BE LEARNED BY THE GENERAL TEACHER FROM TEACHING LANGUAGE TO THE DEAF

F. W. BOOTH, MT. AIRY, PHILADELPHIA, PA.

It is a well-understood fact that principles are discovered, or are most easily apprehended, in cases of their extreme application; for it is then they stand out in bold relief, unconfused and unincumbered, and the mind readily conceives them and accepts them as fundamental, persistent, and essential. Again, it is well understood that the conditions of health, for securing it or preserving it, are best made known thru the study of various conditions and degrees of illness. Thus the student of medicine attends the medical college, not so much to study books and to receive instruction from able preceptors, but because he there finds in the clinics, the laboratories, and the dissecting rooms diseases, disorders, maimings, and deformities centered and massed, and he gains in brief time in their study, and the study of remedial and corrective agents applied, knowledge and skill that he could not by any possibility gain elsewhere and in other ways in a lifetime.

But what of the science of education, and what of the schools where this science is taught? There are normal schools and colleges, and normal institutes and associations, small and large, in countless number, but in them all, without exception, the center of their work and study is the normal child. But as the normal person in full health would be but a poor subject for a medical clinic for purposes of study or demonstration, it would seem that the normal child cannot be the best material, or sufficient material at least, for the normal school for purposes of experimental study and practice. When we consider that the normal child acquires much the larger part of his knowledge without the aid or art of the teacher, and that this self-acquired knowledge is a potent and necessarily a variable factor as entering into all formal and directed study, it ceases to be remarkable that the old pedagogical problems continue so persistently with us unsolved, and that solutions offered from time to time prove so inconclusive and generally unacceptable.

There is scarcely an educational theory that may be conceived that cannot be exploited and proven with the normal child as its subject, for, learning so much without teaching, he naturally learns much thru teaching, regardless of the method employed; so all methods are equally proven — or are equally unproven — in the considerable progress made. There are too many teaching forces involved in the development of the normal child to make possible the clear tracing of any one of them thru its successive stages to its ultimate and invariable effect; hence the very slow advancement in all the centuries in educational science. We educate in larger numbers and in more subjects than they did a thousand years ago, but it may well be questioned if we educate to better knowledge and larger power than when the ancient philosophers and scholars held sway.

But if the normal child, the child who follows teaching easily upon almost any line it may take, is not proper, or the best, material for experimental study, the question forces itself, where can proper or better material be found? In algebra we solve problems by process of elimination, by ridding the equation of one factor after another until it is brought to its simplest terms and thus to the condition of easy solution. May we not do this in education — eliminate factors, one and another of the learning factors, from our problems, thereby rendering them simpler and easier for our study and solution? With the normal child this is impossible, for with him we may not eliminate or shut off from operation any important learning power or teaching influence. Nature is nature, and she will not be balked or far diverted by the pigmy devices and temporizing expedients that our crude theories suggest. So we turn from the normal child, in whom nature reigns with her even sway, to a distinctive class or to distinctive classes of abnormal or sub-normal children in whom nature has herself, in some vagary and in heroic and irrevocable sacrifice, simplified our problems by the removal of one or another of the chief learning factors, leaving the remaining factors thereby and in that much unobscured and unconfused for purposes of didactic research and study. Why not, then, to the end that there may be developed a true philosophy of education, an exact science, if may be, of pedagogy, turn to the defective classes for the material and the conditions needed, and that they provide freely and abundantly for our purposes; to the deaf child, with the elimination in him of the greatest of the educative senses, to study and learn wherein, and how, and how much the sense of hearing, and by the contrasts afforded, the remaining senses are severally contributive in the great educative processes; to the blind child, with the closing of still another great learning channel with the effects of it on the mind and character; and finally to the deaf-blind, who, for the purpose of our pedagogical clinic, is undoubtedly the case extreme, and therefore the case that presents the greatest possibilities for didactic study and experimentation?

It would seem, then, that it is to the field of special education that we must come to find the soil and material and conditions for the growth and construction of a true and exact science of pedagogy.

It is axiomatic that as you increase the difficulty you must in like measure increase the efficiency of the method employed for its overcoming. In the teaching of the deaf, the blind, the deaf-blind, or the feeble-minded, difficulties as they present themselves are extreme; it follows that the methods employed, to be effective of the ends that they aim at and attain, must be superlatively excellent. And they are. I am thoroly convinced that in all cases where measurable success is attained in the instruction of the special classes the methods employed are superior to the methods used to secure the same general results in the work of the instruction of the normal child.

Turning to our subject, we are to inquire what lessons the general teacher may learn from the work of the instruction of the deaf, and more specifically from the work of teaching language to the deaf. The subject is a large one, for the teaching of language to the deaf involves for this class practically the whole work of education. To gain an education the deaf child learns language, and in learning language he perforce acquires education; and thus for our purpose today language may be conceived of for the deaf as the whole aim and end of instruction. To save misconception in the beginning it should be said that language for the deaf is not speech; it may be, and usually is, speech in part. Speech, however, is only a mode of expression; another equally important, and far less difficult to learn, is writing. But language in the whole and in its substance is a psychological problem far more than one either of vocal or graphic mechanics.

Passing over, then, the work of mere articulation teaching in the instruction of the deaf and the very practical lessons that may be learned from it by the general teacher to aid him in correcting faults in the speech of hearing children, and with only a passing reference to the phonetic method of spelling and reading in common use by teachers of the deaf, and which is now so rapidly supplanting the A, B, C method in the schools for the hearing, to the great benefit and the much more rapid advancement of the children in acquiring the art of reading, we may bring ourselves at once to the work of language teaching in its essence, as it presents itself to the teacher of the deaf and of the hearing alike in its psychological-pedagogical aspects.

It will be accepted that language learning is not the accumulation of vocabulary. That is to be sure a part of it, and a not unimportant part, but vocabulary may be likened to the dead body without the spirit. Our aim in language teaching must be to give vocabulary, but much more than that, to give power to use it — to give the art and graces of expression. The lack of the *art of expression* is the great lack of the deaf upon entrance to school, and it is the teacher's ever-present task to lessen it thruout the school course. It is also the great lack, as I count it, of the hearing child under present educational methods thru the school course, and continuing necessarily thru life. We then have the common lack in the two classes, that of the art of graceful, free, and forceful expression. And it is here that we find the great difference in the methods of instruction employed with the two classes, and it may be suggested that we also find the essential element of superiority of the methods employed with the deaf over that employed with the hearing.

The deaf child starting with nothing, with no language, with no means or facility of expression, the aim from the beginning and continuously is to meet the great lack, and the school curriculum is one unending program of talk and write, write and talk, with all else subordinate and contributive, with the result that the deaf child has power at every stage of his progress *to say or write a very considerable part of what he knows and thinks.* Instruction is centered and intensified along this one line of development, to give ability for full and free and effective expression. There is reading, the using of text-books, the acquiring of facts, but these are all incidental to the main thing, which is to give practice in quantity in the use of language for the giving forth of the child's own thought and knowledge. The success attained in giving language to the deaf, coupled with fair facility in its use, thus thru abundant practice in composition work, is evidence of the excellence of the method employed, as it is suggestive of its superiority.

The hearing child enters school with already a certain power of expression, and so neglect to develop or train the power is met by the plea of lack of necessity. The teacher accepts this present power of expression and uses it, but *rarely with the aim or thought to cultivate and increase it.* The child learns to read that which he already knows as spoken language; to write, the mechanical part of it; and to cipher. If his education proceeds farther, it is for the most part but an enlargement of acquaintance with text-book knowledge in the absorption of the facts that they contain. This is education, so far as it goes: it is the education of the schools of today as they give it, and it serves the purposes of life fairly well. But it is not enough, and not enough because a fuller and truer and far more serviceable education is possible in the time spent and with the material and the means employed. The high-school principal of today considers it unnecessary to have his pupils prepare and read graduating essays, so little do they characterize and illustrate the work of the school curriculum as pursued and completed. The writer knows of an instance of this omission at a recent high-school commencement, where a professional entertainer was brought in to fill in the lack. Is it any wonder, when the art of composition is thus discredited and neglected, that the school children of today leave school practically in the same condition as they entered with relation to the great art of free, graceful, and forceful expression? How many men or women met with in business or social circles can even tell a story effectively, and of the few who can, how many acquired this delightful accomplishment as, in any part of it, a result of school training? How many, again, can speak or write with any appreciable effect upon other minds, outside the limits of business intercourse? Except those trained in certain professional lines and the few self-developed, the world is practically made up of men and women wholly lacking in the art of ready and forceful expression. Measured in terms of vocabulary, it may be believed that in but few cases does the speaking or writing vocabulary approximate the half of the reading vocabulary. Most of us find exceeding great difficulty in expressing our thoughts in words and conveying them clearly to others, and in this the illiterate man not seldom excels, being self-trained to it. Why should we not all, without exception, be able to clothe our thoughts in graceful and expressive words as easily as we clothe our bodies in graceful and becoming garb, since in the former case we have unlimited wardrobe to draw upon? Is there any possible answer to this that is not a condemnation of our public-school methods? Homer, it is said, was untaught, and recited without the aid of literary models, and Shakespeare even has need in these days to prove his schooling; but measured by truer standards, who will deny them their place and rank among the truly educated and scholarly? They were not taught, as they needed not to be taught, the art of expression in the schools; but right instruction would scarcely have harmed them, while wrong, misdirected educative methods might indeed have had effects fatally blighting.

A man counts in a community, not as he controls himself, his own mind alone (he is a cipher who does only that, and he is not missed when he dies), but as he controls others, thus increasing himself in his power and influence two, ten, ten thousand fold. Should not our public schools aim at making something more than educated ciphers?

The great lesson that we may draw, then, is that in our curriculums with normal children, as with deaf children, the common lack must be recognized, and it must be met by the same methods. We must emphasize and intensify all teaching to give the art of composition, of free and forceful speech and writing, well knowing that in giving this we give all, for it implies and includes all. Expression is a fundamental educative force. The more a man speaks or writes the more he thinks; and the more he thinks the more he is induced to read and study and seek out knowledge. Expression is thus retroactive in its effects.

Expression measures education, as it gives to it its efficiency and power and usefulness. May we not hope, then, that with absolute demonstration of this as a principle in the work with the deaf, the inquiring spirit of the age will turn to the work and accept from it the lesson that it teaches, and make profit from it for remodeling methods to even greater possibilities of accomplishment for the hearing? May the day, indeed, not be distant when the school curriculum for our children, hearing as well as deaf, shall be in its sum and substance, and from its beginning to its end, *practice, practice, practice* in expression, in composition, in the use of language for all its purposes, to please, to inform, to persuade, to convince, giving therein and thereby mind culture the highest and mind power the greatest attainable, and thus giving the truest education, as useful as it may be in any instance and degree complete.

WHAT IS MINNESOTA DOING FOR HER DEAF CHILDREN?

J. N. TATE, SUPERINTENDENT OF SCHOOL FOR THE DEAF,
FARIBAULT, MINN.

In answering the question, "What is Minnesota doing for her deaf children?" we presume we may claim that she is doing as much as any of the commonwealths. We think we are not presumptuous in this; tho when we realize that the United States leads the nations of the world in the training she is giving the deaf, both in an intellectual and industrial way, we can readily understand that our claim is not a small one.

The Act Establishing the Minnesota School for the Deaf was approved March 4, 1863. The location is ideal. The city of Faribault, the site of the three state schools, for the Blind, Feeble-minded, and the Deaf, and a number of Church schools, is acknowledged to be one of the most attractive towns in the state.

There are something over sixty acres of land connected with the School for the Deaf. This, one of six state and church schools, is located along the bluffs on the east side of Straight river, the town being upon the west. The grounds of these institutions form a beautiful park.

There are now 268 pupils in attendance. Of these 149 are boys and 119 are girls. The school is absolutely free to all deaf children from eight to twenty-five years of age. The cost of clothing and traveling expenses only are to be paid by parents or counties from which the pupil comes. The minimum course now is eight years, and the maximum is thirteen. During the thirty-nine years of the existence of the school, 947 pupils have received instruction. The school has sent 22 students to the college. This constitutes about 13 per cent. of the number of regular graduates. I think it can be shown that a larger per cent. of those who entered the college graduated than from any other school.

I copy the following from a paper read by Mr. J. L. Smith before the Fifth Convention of the Minnesota Association of the Deaf. As this data applies to the 947 pupils who have attended this school I think it applicable and interesting:

> Not one of these is the occupant of a state prison, only one known as the inmate of a poorhouse, and only one is in an insane asylum. Nearly all who have attained to adult age are independent citizens of the state. They are found in all occupations side by side with their hearing brothers and sisters. Following is a partial list of occupations that are now followed, or have been followed, by the deaf of Minnesota: Architect, artist, barber, bookkeeper; book agent, bicycle repairer and manufacturer, carpenter, college student, collector, cutter, cooper, cigar-maker, dressmaker, domestic, editor, fireman, superintendent of school, supervisor, seamstress, saw-mill employe, paper-mill employe, shoemaker, fruit seller, farmer, farm laborer, government clerk, glass stainer, grocer, harness maker, inventor, janitor, machinist, merchant, matron of school, painter, printer, photographer, poultry raiser, rattan worker, teacher, tailor, teamster, wood turner.

While it is true that pupils after leaving school often do not follow the trade learned while there, still they have acquired the habit of application and ideas as well. I deem the industrial training given at state institutions for the deaf to be hardly second to the intellectual in fitting a student for practical life.

You may be interested in knowing something of the means of a general nature employed in developing our pupils — devices not all found in other institutions of the kind, at least in the form used in our school. Blank books, comprising several hundreds of pages, are issued to the teachers of beginning classes, and, to start the scheme, to all teachers. A summary of all work done is supposed to be copied into these books. The book goes with the class and is a guide to the succeeding teacher. In the end it is a complete history of the class during its entire period in school.

We have found the daily summary of news, as written by teachers assigned to the work, on large wall-slates, one for the boys and one for the girls, a fruitful source of information. This, added to the daily papers generously sent to us free, and the numerous weekly and monthly publications placed in the reading rooms of the pupils, has been a source of entertainment and help, not only in the acquisition of information, but of language as well.

For some years past we have had our pupils keep summer journals, or diaries. A large per cent. of them come back to school in the fall with well-written diaries comprising a daily recital of their experiences during the vacation. Since the practice was initiated we have seldom heard any complaints to the effect that pupils have grown rusty during vacation.

The library is well patronized, the older pupils selecting books according to the advice of their teachers, and the various teachers of primary grades selecting books for and directing the reading of their pupils. In all cases teachers are supposed to be familiar with the contents of these books and to discuss them with their pupils. Besides, our pupils have two meetings each month of the Noyes Literary Society under the supervision of the teachers. Their exercises consist of debate, essay, declamation, and dialogue.

Monthly socials are held in the parlors of the institution. To those the pupils of the advanced classes are admitted. On these happy occasions pupils are instructed in matters pertaining to the civilities of life, and such events are looked forward to with much pleasure by the participants.

Monthly lectures in the chapel are delivered to the pupils. Much time and thought are given to these addresses, and they are heartily enjoyed by the audience. Current history of our country and of the world is assiduously studied by the advanced grades. *The Companion*, with the child's department, is issued weekly. Frequent illustrations for the latter are furnished by our art department. The whole paper is eagerly read by the pupils. Extra copies of the children's page are issued for schoolroom use. *The Companion* is copied as largely, perhaps, as any of the numerous family of institution papers.

A brief chapel service in signs is held every morning, except Saturday. In addition, on Sunday, classes spend a few minutes in their class-rooms. On Sunday afternoon, a brief lecture is delivered upon Bible history. Pupils of advanced classes are expected to reproduce these lectures in written form and to present them to the teachers for correction. All moral instruction is of a wholly unsectarian nature. Pupils are allowed to attend the churches of the town when parents wish them to do so.

Every pupil in school has instruction in free-hand drawing. Ninety pupils have received special instruction. Teachers are being more and more impressed with the fact that to be able to illustrate, even in a crude way, is helpful to them at almost every turn in their work. I believe that we cannot think clearly without forming pictures; hence the value of a teacher's ability to make the picture for the undisciplined mind. We are seeking to direct the art training along lines bearing upon the trade of the pupil. In the trades department we may say that the discipline, the mental and the moral benefits incident to this branch of the training of the deaf, is fully acknowledged by all progressive educators. Our work in this line has been fairly commendable. There is much yet to be done before our industrial department can be called ideal. Instructors in this branch should, we think, rank as teachers and receive teachers' salaries. Every pupil has had—the boys, 16½, and the girls, 16 hours a week at work. It will be seen that pupils will have to remain at their trades about five years in order to get one year's apprenticeship. In view of these facts, it would seem desirable that pupils be allowed a year or two after graduating in which to pursue their trade, reversing the time formerly spent in trades; that is, giving six hours to trades and two to literary work.

In the case of those pupils who come from rural districts and who are best adapted to farming, it seemed reasonable to make some provision for them, such as a course at the agricultural school, a branch of the State University. The authorities of that institution have agreed to open their doors to our graduates, the only provision to be made by this institution, in so far as the university is concerned, being an interpreter. As tuition at the school is free, and the actual living expenses are reduced to a minimum, we had hoped that some of our graduates would avail themselves of such an opportunity. As yet none have applied for admission.

There has been the impression that there is a greater tendency among the deaf than the speaking to congregate in the large cities. This is likely true of the deaf of our state. Dr. E. A. Fay, of Gallaudet College, who is perhaps the best authority on statistics of the deaf in America, is responsible for the very gratifying statement that there is a smaller proportion of the deaf flocking to the cities than of the speaking population.

The domestic department is not of minor importance. To say nothing of feeding, washing, clothing, and nursing so many children, the responsibility for the safety of body and character is understood only by those who have undertaken the task. One of our chief duties is to see that our pupils develop correct motives of action. To see that no tares are sown requires eternal vigilance. A little leaven may leaven the whole lump.

Only those who experience it have any correct conception of the magnitude of the obstacles to be encountered in educating the deaf. Tho exactly like other children, they come to us, as a rule, densely ignorant of any regular language. Their English must be acquired largely in the schoolroom. If it is difficult to build a house without a foundation, so is it to impart language to those who have no foundation in language. This institution has been fortunate in employing almost wholly teachers, matrons, and caretakers of experience. No school of this kind can attain to or preserve a high standard of excellence without absolutely rigid adherence to this policy.

Our methods are eclectic. They admit of every known way. Ours is known as the "combined system." We have no pet theories to advocate, hence we adapt the method to the child. Some pupils can make satisfactory progress by the oral method. Others, equally bright, progress best by the manual. We have never lost sight of the one object—the preparation of the pupil for life's battle. One central thought which dominates us from the time the pupil enters school till his course is completed is to give him a knowledge of the English language, in all cases written, and, where possible, also spoken. A child who cannot acquire spoken language may be just as bright as one who can learn to speak and read the lips, so much depends upon quickness of perception and ability to imitate. Such large claims are being made by the advocates of speech and speech reading that silence might be taken as acquiescence in those extreme views. There is a happy *mean*. This we have tried to strike. We should, and do, aim to give every pupil the opportunity to demonstrate his ability to be successfully educated orally. We have now six classes taught orally and twelve manually. We have a complete course of study.

The excellence of this institution may be attributed to several causes. Among them may be enumerated: (1) The hearty support of the citizens of the state; (2) freedom from political domination; (3) the care exercised in the selection of the instructors. I may say that this institution stands for all that is best in preparing its students for taking their position among their hearing brothers.

WHAT MINNESOTA IS DOING FOR HER BLIND CHILDREN

B. P. CHAPPLE, INSTRUCTOR IN SCHOOL FOR THE BLIND, FARIBAULT, MINN.

The Minnesota State School for the Blind is located at the beautiful little city of Faribault, fifty-two miles south of St. Paul. The school is open to all residents of Minnesota between the ages of six and twenty-five years having defective sight. Board, tuition, and books are provided by the state without cost to the pupils; the pupils or their friends furnishing the clothing and traveling expenses. It is a *school*, and not an *asylum* or *home*, as none but the young and the teachable are admitted, and then only for a term of years and while pursuing definite work. The work of the school is divided into three departments—the literary, music, and industrial departments.

The literary work extends thru twelve years. In the primary grades (including four years' work) kindergarten work, point reading, point writing, spelling, number work, mental arithmetic, and beginning geography are taught. In the intermediate grades (also of four years) reading, spelling, mental arithmetic, practical arithmetic, geography, grammar, composition, etymology, primary United States history, and physiology are taught. In the high-school grades, of four years, the work broadens, and three courses are offered — the language course, the German course, and the English course. The courses are as follows:

First year of language course.—Algebra, physiology, geography, general history, and Latin lessons. In this year the German and English courses substitute advanced English for the Latin.

Second year of language course.—Algebra, civics, and United States constitution, physics, Latin—Cæsar. The German and English courses substitute zoölogy and botany for the Latin.

Third year of language course.—Geometry, English and American literature, German, Latin—Cicero. The German course begins German, and substitutes botany, astronomy, and geology for the Latin.

The English course makes the same substitutions for Latin, and also political history and chemistry for the German.

Fourth year of the language course.—Solid geometry, political economy, psychology, ethics, German, Latin—Virgil. The German course continues German, and substitutes rhetoric and sociology for the Latin.

The English course makes the same substitutions for the Latin, and also English history for the German.

Work in elocution is elective thru the high-school course, and many students avail themselves of the opportunity to improve their expression, to gain a better appreciation of literary selections, and to store their memories with choice literature that may be used for entertainment.

Thru the whole course the aim of the school is to do systematic, thoro work, that the student, if he stops here, may have a substantial preparation for his life work; if he goes farther, a good foundation on which to pursue a college course.

The loss of sight, it is true, makes it impracticable to pursue into their details such subjects as chemistry, geology, botany, zoölogy, and astronomy; but an effort is made to give the student a general idea of each subject and its relations to other subjects, thereby extending and broadening his ideas of nature and of life.

In connection with their literary work and correspondence nearly all the students learn to use the typewriter, and many of them with considerable facility.

The music department embraces work thru the whole twelve years of the course, giving instruction in vocal music, instrumental music, including piano, pipe organ, violin, and other orchestral instruments; and also in musical history, harmony, musical acoustics, counter-point, tuning, and repairing.

The chorus work begins the first year and continues thruout the course. For this work the junior and senior singing classes are organized, each meeting twice a week for instruction and drill; also all sing together at chapel exercises every day of the school year. In addition to learning to sing, the pupil stores his memory with songs, hymns, and patriotic songs that are entertaining, stimulating, and inspiring.

Piano work is begun the second year of the course, and if the student shows talent and makes profitable progress the instrument is continued thru the course.

The violin is begun about the sixth year by those that choose it.

Elementary harmony is taught in the seventh and eighth grades, and *advanced harmony* in the ninth and tenth grades.

Pipe-organ instruction is given the last three years of the course to those whom it will profit. Musical history is studied two years — during the eleventh and twelfth grades. This includes study in epochs of music, research into the origin, development, and merit of the various musical instruments, a study of the lives and works of the leading composers and performers of the world, different kinds of musical composition, etc. Instruction is also given in orchestral instruments, and the school has had a good orchestra for a number of years.

Attention is given in the music department to mechanical work, as the details of piano and pipe-organ construction, practical work in piano and pipe-organ repairing, and special attention to piano and pipe-organ tuning.

The aim in the music department is to make the work thoro, accurate, scientific, and practical, that the pupil may use it not only for his enjoyment and that of others, but that he may put it to practical use as a teacher, a performer, or a tuner, in gaining a livelihood. A number of the graduates are now doing good work in these callings and supporting themselves well.

Work in the industrial department proper extends thru the first eight years. It begins with bead work, which is continued four years. This work consists in stringing small and variously colored beads on brass wire, which is looped and tied so as to form various articles, as vases, pitchers, baskets, boxes, napkin rings, etc. — articles ornamental and more or less useful. But this work is given, not for the value of the product, but for training in skill and deftness of hand and fingers, and attention and patience in accomplishing a definite object in a systematic way.

Bead work is followed by hammock making and netting work. In this work both the training and the product are valuable. Then rattan work is taken up, baskets and boxes being made of this material. This work continues the hand training and aids in developing ideas of form.

In the intermediate grades, sloyd is taught, the pupils learning to use tools, as the saw, plane, square, hammer, chisel, file, etc., with some degree of skill. The hand training is valuable, ideas of form improved, and the product ornamental and useful.

An important and practical part of the industrial work is mattress making and repairing, and broom making. The older and stronger boys in the intermediate grades, and some in the high-school grades, devote a period each day to this work. Here, again, the training and product are both valuable, and the boys learn a trade by which to make a living after leaving school. During the past year nearly forty-five hundred brooms were made and sold at the market price.

Another branch of the industrial work taken up by the girls of the intermediate and high-school grades is sewing and embroidery. They learn to use the needle with skill and to operate the sewing machine in making garments. The fact that some of them can thread a common needle by the sense of touch alone shows that deftness of fingers is acquired. This knowledge of sewing, in cases of necessity, can be turned to good account in making clothing for themselves and others.

In the high-school grades, the young men who expect to give special attention to music pass from the industrial work proper to the mechanical work in music, as repairing and tuning, the industrial work having been excellent preparation for this work. Others not interested in music may continue the industrial work thruout the course.

Thus it will be seen that the school offers advantages to pupils of different aptitude. If a pupil enters early and has good faculties, he may take the complete literary course; if he has talent in music, he may take a part or the whole of a music course with the literary work; if he lacks taste for music, he may take more industrial work with the literary work; if he enters late and has little aptitude in either literary work or music, he may devote most of his time to industrial work.

As to morals and religion, the school aims to inculcate and to require strict moral living. Each pupil is urged to select some church, the choice of his parents, and attend there regularly; all of suitable age being expected to attend every Sunday, the girls being accompanied to and from church by one of the teachers of the school. Sabbath school is conducted in the chapel each Sabbath by the superintendent. All the pupils attend, receiving non-sectarian instruction in Bible history and Bible truths.

What is the state doing for the blind? To appreciate this it is well to understand the conditions that do exist and the conditions that would exist without the school, remembering that the number of students has increased from three pupils, at its inception thirty-six years ago, to ninety, at the present time, and that the near future is certain to add many more.

One young man came to the school six years ago, having lost his sight by an accident when about 20 years of age. Having received little training, he came gloomy, despondent, feeling that there was nothing he could do or be; that all cheerful living for him was past; in fact, that life was not worth the living. He learned to read and write the point system, and took a part of the literary course, giving special attention to the industrial work. He became more cheerful, hopeful, industrious, and forward looking. On coming back to the school last fall to do more industrial work, he stated, in the course of a conversation, that when he became blind he did not possess more than five dollars, but then (last fall) he had five hundred dollars in the bank drawing interest. He took a hopeful view of the future, and felt confident, with health, of being able to make his way in the world. He had saved five hundred dollars in five years, altho the greater part of his time had been spent in school.

Several young men, graduates of the school, have positions as tuners with music houses in the city. They are doing good work and earning good living salaries. Another graduate earned money enough in a few years to take a course in law at the university. He has finished with credit two years of the course and expects to complete it next year. By a law passed by the legislature last winter all tuition and fees are remitted to the graduates of the School for the Blind. One graduate also completed a college course at one of the colleges of the state, then took the degree of Ph. D. at Yale, and is now a clergyman. So far as known, he is the first blind man to take such a degree.

Another graduate took several years' work at the university, then a course at a Chicago medical school, and went out to practice.

A recent young lady graduate made for herself, while in the school principally, over three hundred point books containing outlines of many subjects, biographies, poetry, and other choice literature. She also copied for her own use the whole of an abridged English dictionary, and is now preparing to edit a paper for the blind. Another graduate earned money to send a younger brother thru the university, and is now paying the way of a second younger brother thru the university. Other young men and women go out to the smaller cities, towns, and rural districts of the state to become teachers of music, performers, tuners, etc.

These facts are mentioned, not from any desire of laudation of the school, but to give a just idea of what the school is doing and is trying to do; also as an incentive to others of this class who seek a higher life and higher fields of usefulness, for consciousness of achievement in the past helps to achievement in the present.

This is what the state has been doing for the blind. It has been liberal toward them in the past. It has provided beautiful grounds, commodious buildings, necessary equipments, and a competent corps of officers and teachers. The state has expended for the education of the blind in the last ten years over two hundred thousand dollars.

WHAT MINNESOTA IS DOING FOR HER FEEBLE-MINDED AND EPILEPTICS

DR. A. C. ROGERS, SCHOOL FOR FEEBLE-MINDED, FARIBAULT, MINN.

The Minnesota School for Feeble-Minded was organized in 1879. Twenty-two children were taken from the hospitals for the insane and placed in a frame building rented for the purpose by the board of trustees of the Minnesota School for the Deaf and Dumb and the Blind. This work was only as an experimental school.

The following legislature made an appropriation for permanent quarters, and the institution has grown steadily until at the present time there are 876 feeble-minded and epileptic persons under the care of the institution. Fifty-six per cent. are males.

They are classified as follows: Training, 325; custodial, 382; epileptics, 169.

From this small rented frame building it has grown to a large institution, representing the investment of nearly half a million dollars, and to the support of which Minnesota cheerfully grants an annual appropriation that at the present time equals $136,000. The care and management require a corps of 150 people.

The direct objects of this institution are the care, training, and treatment of feeble-minded and idiotic persons and epileptics. The indirect object is to remove from homes the abnormal and defective children who cannot be properly cared for in these homes, and whose presence interferes with the proper training of normal brothers and sisters.

The backward child can make little or no progress in the common schools. He is apt to be the object of ridicule, and thus the tendency is to acquire an irritable disposition and nervous habits. As such children grow older, their incompatibility with normal children in normal homes becomes more marked. In poor homes the attention which such children require interferes disastrously with the breadwinning function of the family.

The institution is intended to become a pleasant home for all the classes mentioned that may need it.

The training consists of organized school work from the kindergarten to what would correspond with the intermediate grades of the common schools, reinforced by and co-ordinated with various manual-training exercises and employments.

Colonization of the adults into small industrial groups all in one large village community is to be the tendency of developmental progress.

Epileptics are closely related to feeble-minded from the fact that the disease once thoroly established tends to produce mental deterioration. Regular habits, selected diet, abundant occupation for mind and body, freedom from the anxiety attendant upon exposure to danger, with judicious medical treatment, are the factors that improve the epileptic's condition.

Colonization into pleasant homes, which should secure the above conditions, should be the predominating thought in institutional development.

CAUSATION

It is a very difficult matter to obtain reliable data concerning the etiology of the defective conditions with which we have to deal. As a general statement, it is an exhausted condition of the nerve force in the parents that is largely responsible for this causation. Worry and trouble in some cases, the strenuous life in many, physical overwork or social ambition, and dissipation in a few cases, result in defective progeny.

Only the collection of all facts pertaining to the family history of these people covering a period of many years will produce data that will be of genuine value in the study of etiology.

Minnesota has contributed something to the study of experimental psychology among the defectives, and the studies of Dr. Wylie as to the measurement of the sense-perception among the feeble-minded as compared with normal children are published in the *Journal of Psycho-Asthenics.* I am glad to state that he is continuing his investigations along these and similar lines.

Minnesota has developed, in a modest way, a system of training for attendants and nurses for feeble-minded, being the first state to attempt this work.

Whatever success these institutions have attained in either of these lines has been largely dependent upon her progressive, public-spirited citizenship represented in the management of the institutions by the intelligent, loyal board of trustees and board of control.

VICTORIOUS AMERICA!

G. FERRERI, EX-VICE-PRINCIPAL OF THE SCHOOL FOR THE DEAF, SIENA, ITALY

An Italian writer, who visited the United States at the time of the Cuban War, sent a series of interesting articles to Italy for publication in a newspaper. Afterwards he collected these articles in a book with the title, *L'America Vittoriosa* (Victorious America).

I am visiting this country, as you know, for quite a different purpose, and in a time of peace; but I also have the intention of writing a report, in order to give an answer to my European colleagues who wish to know "what the United States is doing for the education of the deaf." Well, every time that I think over my future report I cannot free myself from the suggestion of that title — *L'America Vittoriosa.* Yes ; America is victorious also in the national educational work, because here the instruction of all citizens is provided for, and, before all, of those who cannot become useful citizens without a special education.

Altho I am now in a favorable position for making comparisons, yet I am not quite sure of being able to express in words my particular impressions. However, I do not wish to lose this opportunity for expressing my general impression that, in regard to the education of the defective children, in Europe we are idealists, while in America you are practical; as great a difference, you see, as that which lies between "to be" and "not to be."

In Europe we speak and write much — too much perhaps — and we have the best ideas and the finest theories on the general education of the child, and particularly of the deaf, as well as of the feeble-minded ; but we have not the means to put these ideas and theories into practice. Here I find the contrary. The Americans put into practice our ideas, and they make every effort to do it well. In Europe we have a large and rich special literature on the education of defective children, but there I have never seen put into practice so largely and liberally the suggestions of science in regard to the care and education of these children as is done in every state of this American union. And here I find also the best schools for the deaf.

When I say this to my European colleagues they will certainly ask me also for the reasons of this great difference.

During my journey from Boston, I was reading the *American Notes* of Rudyard Kipling. At the end of the first chapter the author observes that "in America money is everything."

You know better than I with what wit and meaning Kipling made such an observation, but I am glad to complete the sentence, saying, if not with wit, at least with truth : In America money is everything, because only with money is it possible to put theories into practice ; and this is true of every kind of knowledge and energy. What else but the lack of material means prevents the majority of the civilized nations from spreading the benefits of primary instruction ? Money is, in this case, the first and fundamental condition ; and I could illustrate my proposition with a quantity of facts and comments. I am sure of not exaggerating when I say that, comparatively speaking, there is not another country in the world where so much money is spent for the national education as in the United States. But I must add another reason ; I have had many opportunities to realize that in America there are, besides money, also the best moral means. Among them I am glad to enumerate the following ones :

1. A great sympathy and active charity for all unhappy children.

2. A strong desire and great energy for putting into practice what science suggests in order to help them.

3. Intelligence, training, and study in those persons who are called to teach in and to direct the special institutions.

Therefore, to the inquiry of my European colleagues, what are the Americans doing for the education of the deaf ? I can answer without any hesitation : They are doing the best which it is possible to do in the present conditions of science ; and in a not far distant future they will be our guides in the progressive development of our special line of education. "Victorious America !"

THE ORGANIZATION OF ASSOCIATIONS OF PARENTS OF DEAF CHILDREN AS AN AID TO SCHOOLS

MRS. HELEN M. HEFFERAN, CHICAGO, ILL., PRESIDENT OF THE ILLINOIS MOTHERS' CONGRESS

The two great institutions which contribute most to the life of the child are the school and the home, and the two elements in this environment that influence him most for good or evil are the mother and the teacher. I believe the best educational results cannot be obtained without the co-operation of these two.

Many organizations have been formed in the last ten years for purely philanthropic purposes — to alleviate human suffering — and they have work enough to do; but what we need most at the present time are organizations that will get at the root of the evil in our social system. We know that there are many social evils which have their origin in the mismanagement of childhood, and we need organizations to study the child in every possible way. I am convinced that the first and most important study for both mother and teacher is the study of the child; there is no more important study.

It is gratifying to feel that this zest for child study, this attempt to make the child's mind an open book, is taking the precedence of all other studies in our educational circles, because it is the basis for all educational work.

The greatest obstacle, I believe, to educational progress today is the profound apathy and indifference to real education on the part of the parents. Many a mother who would die for her child will not and cannot be made to think intelligently of that child's nature, to study the child and use all possible means at hand for that study. These mothers are like the fisherman's wife who was feeding her eight-months-old baby a herring. Someone who knew more about nourishing children remonstrated with her. "Don't tell me how to bring up children!" she replied angrily, "haven't I buried ten ?"

The teachers feel this indifference keenly. They say we are content to put our children in one end of the educational oven and take them out at the other end "done." If they are "underdone" we blame the teacher and the method and the school, and if they are "overdone" we blame the teacher and the method and the school; but if they are just "well done," we say it is inherited genius.

Many "parents' organizations" now exist in connection with schools for the hearing and the deaf.

The methods at present in use for the deaf, which are in advance of former methods, all parents should become acquainted with. The new movement of sending the schools to the people, of having schools as near to the homes of the pupils as possible, that association with hearing children may contribute to the success and happiness of a deaf child, should be impressed on the parents. The parents should realize that the home influence must always be the best for the future as well as the present welfare of the deaf child, and the nearer we bring the small community of the deaf school to the great fundamental community of the home the better for the child.

Then, too, parents are responsible for very many wrongs done the deaf child in the past. He has been encouraged to shun publicity, and has been made supersensitive by being individualized and set apart for undue sympathy, being allowed to dwell in a little universe by himself. Popular tradition had it that deaf children were all cast in one mold and very unlike normal children. We know that this is not so; we have them with strong individualities, each unlike, as results of environment and degrees of deafness, as well as temperament and mental endowments. We therefore have among those deprived of hearing, just as among those who hear, the bright child, the average, the dull, the feeble-minded, and the occasional genius. But they all share alike the inability to speak and the lack of the knowledge of language, which formerly led to the belief that the deaf were incapable of being educated. But educators have proven to us that this is not so, and are bringing parents to a realization of this fact. And now to the help of the individual parent has been added the help of the parents' associations to bring about a knowledge of the importance of the teaching of speech and lip reading to the deaf, of motor training, and of all forms of expression.

Many such parents' organizations exist now thruout the country, and are bringing comfort, help, and hope into many homes. I know of one such organization in Chicago, the "Little Deaf Child's League," a federation of small clubs. It has encouraged home instruction in lip reading; aided in raising funds for the schools for the deaf; helped deaf children financially, so that they might attend the public school in the neighborhood. It has brought deaf children into more extensive social relations with hearing persons; brought about a visiting habit in the schools, so that every day parents may be seen in these departments; but above all it has been teaching parents that all the pedagogical principles pertaining to the education of the normal child are applicable to the deaf also.

The period of childhood is short, but the greatest work intrusted to parents is to be done within that time, and these organizations will have done a good work if they result in sympathy, co-operation, and entire harmony between parent and teacher so that both will have a good knowledge of child-need and child-nature.

DISCUSSION

Dr. Alexander Graham Bell, the president.—There is no other thing more important than this of bringing the parents of deaf children into close touch with the work being done for their children. There are associations of parents in Boston, Chicago, Milwaukee, Los Angeles, Halifax, Cincinnati, and other places. Why should there not be associations of this kind in connection with the public-school work? Mrs. Bell took up the work of organizing an association at Baddeck, Nova Scotia, and it has been of inestimable advantage to the Baddeck Academy. Why should there not be an association of parents in connection with every public school in the country?

A member stated there was such an association in St. Paul.

W. D. Parker, state inspector, schools for the deaf, Madison, Wis.—Some years ago there was organized in Milwaukee what is known as the "Phonological Society" in connection with the school for the deaf. This society has extended its work and influence to other cities in Wisconsin, and there are now in successful operation eighteen day schools for the deaf in the state, a number of them with parents' associations as adjuncts. There should be encouragement to the idea of joint effort of parent and teacher in the education of the child.

Senator J. H. Stout, of Menomonie, Wis.—We should bear in mind that our school work will go much better if we interest the parents in that work. The schoolhouse door should be open to parents at all times. More than that, school boards and teachers should meet frequently. Finally, it should be on the program that the school children should visit the industries of the town.

Miss Mary McCowen, supervising principal, Chicago day schools for the deaf.—We began organizing parents in Chicago as a matter of necessity. The hours of the children before and after school had to be utilized for the benefit of the children, so we had to bring in the parents. We taught them how to help the deaf children out of school. In our meetings we taught the mothers by questions and answers. After the first six months the mothers organized local mothers' classes. We have nine local mothers' classes in Chicago. They hold meetings at various times—some on Sundays as the only time possible. In some districts the parents are mostly foreigners, some not understanding English, or seeming not to. But we talked to them and soon we found that they did understand.

In our day schools we have the long summer vacation. We have started vacation schools, and they are very popular. Parents contribute money for their support. In one of our day schools the hearing children have organized a club to assist the little indigent children.

NECESSARY EVILS

JAMES J. DOW, SUPERINTENDENT OF SCHOOL FOR THE BLIND, FARIBAULT, MINN.

All life is a compromise. From the cradle to the grave we accept the thing we would not, lest a greater evil come upon us. We forego the thing we would, that a greater good may be ours. In many things the world has deliberately accepted the lesser evil to escape a greater or to secure an otherwise unattainable good. In many things the world is still in dispute which of two or many forms of evil to accept that a desired good may be attained. In scarce anything is there the perfection of unalloyed good. The reasonable thing, which, on account of the ignorance or perverseness of humanity, is not always the attainable thing, is the acceptance of that condition which promises the maximum of good with the minimum of incidental and inevitable evil. All the great and little problems of life are illustrations of the attempt to reach such felicitous conclusions.

In the minor circle of school life, which lies within and forms part of the greater whole of social life, the same problems present themselves and the same necessities appear. On every hand the questions arise, which is the greater evil that must be shunned, even tho a lesser must perforce be accepted? Which is the greater good that must be sought, even tho thereby a lesser good must be sacrificed? Because educational life in its present scope is a vastly newer thing than the social life of the civilized world, there are in it more unsettled problems, more cases where we have not yet agreed upon the good we must retain, upon the sacrifice we must make that we may retain it. Moreover, when such questions have apparently once been settled, the tendency to return, to reconsider, to weigh over again the evidence, is very marked. The evil which has gone along with the settlement of the problem presses upon us and we are not ready to accept it as inevitable.

In this Association we have this week listened to the earnest and impassioned presentation of the evils arising presumably from the absence of the Bible in our public educational system. Our hearts have burned within us at the thought of the possibility of the establishment of this great literary and religious classic in our school life. But not all of us have forgotten the disastrous and distressing conflicts by which communities have been torn in sunder in the attempt to attain this seemingly most desirable end. Nor have we forgotten the sad but apparently inevitable conclusion slowly forced upon us that the peace and perpetuity of our public-school system demanded that instruction in the Bible be relegated to the church and the home.

This single case is illustrative of what is constantly occurring in the educational world. Questions are not settled, or do not stay settled, because of the evils which seem to be attendant upon any form of settlement. The pendulum swings to one extreme and returns to the other, the old disputes are revived, the old arguments are reweighed, but decisions do not remain final because of the attendant evils which they carry with them and which we are not willing to accept as inevitable.

It has occured to me to present for your consideration two illustrations of such problems and the evils attendant upon any solution of them now apparent, which are directly involved in the work in which I am engaged (the education of the blind), and which reach out more or less extensively into the general educational field.

The first to which I call your attention is the question of the aggregation of children needing special methods of instruction in institutions more or less remote from their homes. The value of the home life to the growing child is so supremely great that it can hardly be overestimated. I do not mean that the child may not be materially as well cared for elsewhere. I suspect that the average of material comfort in institutions for children is higher than at their homes.

But institutions are not homes, and, even with the best and highest intention, can never be homes. The home idea as developed in the family life can only be got in the home itself, and the child removed from the home during the critical decade between six and sixteen can never really know the meaning of the word "home." Any deprivation of the opportunity to form this home idea is an evil of appalling magnitude. This has become so fully recognized that boarding-schools for the elementary education of normal children are in little favor. They exist mainly for those who are homeless, or for those whose parents are willing to relieve themselves of the responsibilities which properly devolve upon them in the home.

In the case of secondary education, the question is less positively settled, but the strong current of intelligent opinion today sets toward home education. The remarkable development of the public high school in the last twenty years is significant as an evidence of the trend of public opinion in this direction. Both sides of the case have recently been ably presented in the *Educational Review*, of New York; but, regardless of the value of the arguments on either side, it is coming to be generally accepted that, where conditions will in any way permit, secondary education should be pursued at the pupil's home. And it can scarcely be doubted that the strongest impulse toward this conclusion comes from a recognition of the importance of the home life upon the youth at this critical period. We are not willing the definition of "home" should become "a place in which to spend vacations."

So much for the case of the normal child. The argument is in some aspects still stronger in the case of children with such defects as loss of sight or hearing. The aggregation of children of like deficiency tends to emphasize that deficiency, to separate them in mind as they are separated in fact from the rest of the world, to prevent them from seeing the world from the standpoint of the world, to propagate in them the idea that what is really for the world almost a negligable factor is of immense importance. In short, by giving them a wrong standpoint it gives rise to a wrong view of life. These evils, then—the failure to acquire the home idea and the formation of false ideas of their relation to the world in which they are to live—almost if not quite inevitably arise in the aggregation of children of like defects in an institution for any considerable period of time. The recognition of the possibility and the fact of these evils has raised the question whether they are a part of the necessary price which must be paid in order to secure the development and training of the child.

Thus far the tendency has been to answer this question in the affirmative. It is asserted that the evils are greatly mitigated by the fact of the difficulty, if not the impossibility, of giving the defective child, under the conditions which exist, a true home idea even at his home, and by the fact that only in placing him with those of like defect does he come upon the same plane of equality with his fellows, which is the natural relation of the normal child with his fellows, while it is held that the resulting good vastly overbalances these evils when they are reduced to their minimum by wisely-directed effort.

As regards the deaf, a very vigorous controversy has been in progress for some time between the advocates of the institution idea and the day-school idea. As yet the weight of influence remains with the institutions in spite of great and widespread effort to overcome it. Of the merits of the controversy I cannot speak from other than the standpoint of an interested observer. The problem must be worked out by experts in that department of educational effort, but this much I can say, that it will not be finally settled until the basis of a maximum of good with a minimum of evil has been reached, nor can it be expected that any settlement will be free from attendant evil.

Similar questions have been raised concerning the blind. Aggregation is an evil in some of its aspects. Is it a necessary evil incidental to the securing of a greater good, or is it possible to secure for the blind child the educational and disciplinary advantages of the special school and yet retain for him the benefits of home association and avoid the evils arising from too exclusive association with his own class? For many years I have earnestly sought an answer to these questions, and I would gladly have found one different from that which has been forced upon me. But as yet I can only say, whatever the evils of aggregation may be, they must be borne for the sake of the greater good. So far no adequate training can be found for the blind child outside of the special school.

No one can know better the incidental evils of institution life than one who has shared that life for more than a quarter of a century, as I have; yet the advantages seem to me to outweigh many fold the incidental and necessary evils. These evils, moreover, are mitigated by the three months of vacation at home each year, in which family ties may be maintained and the family spirit cultivated in so far as the conditions permit; for it must be understood that the presence of the blind child in the home does not generally insure him the normal home idea, for his condition in the family is not normal. The true idea of the home is each for all according to capacity and need, common sacrifices, common benefits. The larger sacrifices naturally come from the parents; the larger benefits flow to the children. Yet by each something is done; from each something is enjoyed. The blind child has small part in the sacrifice, but full share in the benefits. All for him, he for none, is too often the case. A false sense of sympathy also often prevents proper training of mind and body. Ignorance allows the formation of uncouth habits of body, or leaves the physical powers almost entirely undeveloped. The tenderest of parents will not infrequently present a child at an institution helpless to an incredible degree, and uncouth and even repulsive in manners and bodily movements from sheer lack of training of the most elementary sort. A strangely false sense of shame will sometimes even cause the child to be kept secluded at home from all except the members of the family, and compel it to lead a scarcely more than vegetative existence. In such cases removal from home is a necessity in order to secure anything like a normal development of the child.

Again, as has already been intimated, the aggregation of those of like defect is not wholly an evil. The association of the blind with the seeing is almost always on a basis of dependence. It is not a normal relation. Many a blind child gets his first idea of normal association with his fellows by being brought into association with those of like defects. He must give and take on a common plane as normal children do, but as he has never done before. These mitigations of the evils of aggregation, tending sometimes to actual benefit, are worthy of consideration and lead up to the more positive benefits which grow out of direct effort and the application of sound methods to the training and development of the body and mind of the pupil. Under present conditions, or under any conceivable as likely to exist in the near future, the blind cannot be properly educated and trained except in special schools supplied with the proper facilities of personnel and material for that purpose.

On account of the smallness of numbers and wideness of separation of the blind, day schools are impracticable save possibly in the very largest cities. Home education is confessedly impossible, except for the wealthy, and even with such there have been striking cases of most complete failure in efforts at home education, which have proved brilliant successes when special school attendance has been tried. Education with the seeing in public schools, from which so much has been hoped, has proved a failure. It assumes that special knowledge and methods are not necessary for special conditions, and even in the rare cases, where there has accidentally been such fitness on the part of the teacher, the additional strain of extra effort and extra time demanded of the teacher has prevented any long continuance of such attempts.

Without question there comes a time when the education of the blind can best be carried on with the seeing. All higher education above the secondary schools should be so conducted, since abundant experience in our colleges and universities shows that it can be successfully done. The question whether some considerable portion of secondary instruction may not be so taken is an interesting and not wholly settled one. Certainly the difficulties at that stage of mental development are great, and they have sometimes proved insurmountable. Unexpected obstacles of detail arise, making the work difficult; if not impossible. We have in tangible print an excellent line of modern text-books in all the branches ordinarily pursued in elementary schools; but if these particular text-books should not happen to be used in the school the pupil was attending his task would be immensely increased and might become impossible. A case of this kind came under my observation last year. A boy had gone thru his first year's Latin at an institution, but desired to go on with his work in his home high school. He had his text-book of Cæsar's first four books on the Gallic war in tangible print, but it happened that year that the high school for the first time took a special "second year's work in Latin" which contained so much matter not in his Cæsar that he was unable to go on with it. He had available in tangible print for his first year's work in German, *Harris' Lessons and Reader*, but in the high school another author's lessons and reader were used, which more than trebled his work. Difficulties of this kind are almost certain to occur, which are likely to prove fatal to the pupil's progress at this stage of his development. When, in addition to these, account is taken of the opportunities offered in music and other lines not ordinarily presented in high schools, it seems probable that it will prove wisest for the pupil to complete his secondary education at the special school for his class.

A second illustration of this class of problems is the expansive courses of study which so widely obtain today, and the inevitably superficial character of the results which follow from them. For a long time these tendencies to expansive courses have been showing themselves in our secondary schools, and they are still gaining ground. For a lesser time they have been descending into our elementary courses in the primary and grammar grades. The work which has been exhibited to this Association in such profusion by the grade pupils of Minneapolis is an illustration of one phase of this expansion.

The question of the propriety of such expansion may fairly be said to be the burning question in public-school education today. The term "fads" has come to be a common nickname applied to some of these expansions by those unfriendly to them, and bitter outcries arise against the evils they are said to bring in their train. We hear it said that the stream which runs broad must run shallow; that there is a lack of proper grounding in the essentials; that "fads" have run away with the schools; that children grow up to potter, and not to master. Words like these, and even more severe, we are constantly hearing. Perhaps the word which sums up in itself the greater portion of these objections is "superficial." Our expansion has been at the expense of thoroness. We spread our effort and the effort of our pupils over a large area, but we work it to little depth.

What shall the defense be? Can we answer that the charge of superficiality is not true, or shall we say that, tho true, it is not fatal to the value of the work? Perhaps somewhat of both. There is much of regrettable superficiality in the best modern public-school work, yet perhaps this is an evil incident much more to a time of life than to a course of study. Children and youth work on the surface, because they are children and youth. They need variety and diversity of occupation. The modern tendencies supply these, and sometimes, no doubt, at a certain cost of thoroness. This lack, perhaps, is rather more marked in the secondary courses of study, where expansion has gone farthest, and where more fullness of grasp is to be looked for. There are here doubtless some indications of breadth at the expense of depth. The extent and character of the evil cannot be dwelt upon, tho it may well be questioned whether it be as great and in as many ways as is claimed by the opponents of this expansion.

Turning from the general subject to a particular field, a glance at the recent courses of study and training in schools for the blind shows this tendency to expansive courses of study at its maximum. There will be found, in addition to a wide expansion of study courses proper, all possible forms of manual training, both cultural and industrial, and musical training in all practicable forms and adaptations. Without pretending to understand the conditions and results of these tendencies in public schools, save in the most general way, I desire to express myself in full sympathy with the expansive courses of the schools for the blind, in spite of the possible or actual evils of superficiality, distraction of thought, and diversion of energy.

The tremendous limitations of the blind are neither appreciated nor appreciable by any except those who have been for a long time in closest contact with them. They are far less likely than are others to have gateways of knowledge opened for them elsewhere than in their school life. Their reading is limited and their observation restricted by the conditions of their infirmity. An initiative from without which might possibly be dispensed with in the case of others is indispensable with them. We can therefore afford to take the chances of discursiveness for the sake of the broader view.

After all there are many false ideas current with reference to thoroness. It is a dangerous thing for a pupil to think any knowledge he may acquire anything but superficial. Pupils must be made to understand that they have worked only upon the surface. The tendency of much modern instruction is misleading in this respect. Because some of the forms and methods of real investigators are employed, the pupil too often comes to look upon himself as an original investigator, and to plume himself accordingly. Such a mistake may often prove disastrous, and no such illusions should be permitted. This well assured, scores of charming gateways of knowledge may safely be opened. Beautiful vistas may be revealed thru them, and the glowing imagination may be so kindled by their charm, at this period of life when impressions are most vivid, that the gates will never after be closed, but will ever lie open for more and fuller revelations as the years go on. To implant in the child the passion to know is the most valuable thing you can do for him, and it can be done only by presenting to him objects of knowledge in inviting and inspiring forms. I believe that the newer tendencies in courses of study point in this direction, and I rejoice in them in spite of the possible or actual evils that may be attendant upon them.

In conclusion, permit me to recall to your minds my original proposition that all blessings in life come to us more or less marred by attendant evils; yet, because these evils may loom imposingly before us in our hours of depression, it does not follow that we have not received the blessings. It is only incumbent upon us to keep our faces to the light and to seek ever for the maximum of good and the minimum of evil.

DEPARTMENT OF INDIAN EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—MONDAY MORNING, JULY 7, 1902

The Department of Indian Education met in the Plymouth Church, Minneapolis, Minn., at 9 o'clock.

Prayer was offered by Rev. L. H. Hallock, Plymouth Congregational Church.

Music—organ solo, "Fiat Lux," *Dubois*, Mr. Hamlin H. Hunt.

After a selection by the Indian band of Chamberlain, S. D., addresses of welcome were delivered by Hon. David Percy Jones, president of the city council; Hon. J. T. Schultz, deputy state superintendent of pubilc instruction; Hon. Thomas F. Quinby, president of board of education; and Dr. C. M. Jordan, city superintendent of schools.

Responses were made by Miss Mary C. Collins, missionary, Standing Rock Agency, N. D., Superintendent E. C. Nardin, Mt. Pleasant Indian School, Michigan; President S. M. McCowan, superintendent Chilocco Agricultural School, Oklahoma; and Miss Estelle Reel, superintendent of Indian schools, Washington, D. C.

Vocal solo—"Sancta Maria," *Faure*, Miss Frances Vincent.

SECOND SESSION.—MONDAY AFTERNOON

The meeting was called to order by the president.

Prayer was offered by Rev. S. D. Hutsenspiller, Hennepen Avenue Methodist Church.

Vocal solo—"Song of Thanksgiving," *Allitsen;* Mr. F. H. Forssell.

After a selection by the Girls' Mandolin Club, of Chamberlain, S. D., President McCowan delivered the annual address.

The remaining exercises were as follows:

1. "The Teaching of Agriculture with Reference to Future Employment"—Superintendent L. M. Compton, Tomah Indian School, Wisconsin.
2. "Drawbacks to Indian Civilization and Citizenship"—Superintendent H. G. Wilson, San Carlos, Ariz.
3. "How to Teach the Indian Boys and Girls to Become Homemakers, Especially from an Agricultural Standpoint"—R. D. Shutt, industrial teacher, Tulalip Agency, Washington.
4. "The Value of the Outing System for Girls"—Miss Laura Jackson, girls' manager, Carlisle Indian School, Pennsylvania.

THIRD SESSION.—TUESDAY MORNING, JULY 8.

The session was opened with prayer by Rev. F. A. Sumner, Plymouth Congregational church.

Music—vocal solo, (*a*) "Why Love is King," *Buck*, (*b*) "The Lark now Leaves his Watery Nest," *Parker*, Miss Grace M. Ames.

President McCowan announced the following program:

1. "How the Newspaper Should be Used in the Education of the Indian."—Hon. Wm. T. Harris, United States Commissioner of Education, Washington, D. C.
2. Address—Dr. Nicholas Murray Butler, president Columbia University, New York.
3. Address—Most Rev. John Ireland, Archbishop of St. Paul.
   Music—Indian band from school at Chamberlain, S. D.
4. Address—Hon. Alfred Bayliss, state superintendent of public instruction, of Illinois.

5. "The Need of Home Societies for the Encouragement and Protection of Indian Young Men and Women" — Superintendent J. C. Hart, Oneida Indian School, Wisconsin.

6. "Tuberculosis" — Dr. J. S. Perkins, superintendent Truxton Cañon Indian School, Arizona.

7. "Opportunity and Judicious Direction for the Indian" — C. W. Crouse, United States Indian agent, Ft. Apache, Ariz.

8. "Class-room Work as Outlined in the Course of Study" — Mrs. J. C. Hart, teacher Oneida Indian School, Wisconsin.

FOURTH SESSION.—WEDNESDAY MORNING, JULY 9

President McCowan called the meeting to order at 9 o'clock.

Prayer was offered by Rev. J. Harrington, Church of the Ascension.

Vocal solo—"Love the Peddler" (German), Mrs. Edmund E. Smith.

Selection, Chamberlain Indian Band.

The following was the program of the session:

1. Address—Hon. Augustus S. Downing, principal Training School for Teachers, New York city.

2. Address—Hon. Z. X. Snyder, president State Normal School, Greeley, Colo.

3. Address—Miss Alice Robertson, supervisor, Creek Nation, I. T.

4. Music—Chamberlain Indian Mandolin Club.

5. "The Value of a Large Agricultural School to the Indian Service" — Superintendent S. M. McCowan, Chilocco Agricultural School, Oklahoma.

6. Violin solo, Mr. Carl Riedelsberger, (*a*) "Neapolitan Serenade," *Sgambati*, (*b*) "Hungarian Dance," *Nachez*.

7. "Correlation of Schoolroom and Farm Work" — Mr. E. C. Nardin, superintendent Mt. Pleasant Indian School, Michigan.

8. "What is Our Aim?" Mr. E. A. Allen, assistant superintendent, Carlisle Indian School, Pennsylvania.

9. "Advisability of Having Schools of a Moderate Size in Order that Pupils May Receive More Individual Training" — Superintendent H. M. Noble, Grand River Indian School, North Dakota.

FIFTH SESSION.—THURSDAY AFTERNOON, JULY 10

After prayer by Rev. William B. Riley, First Baptist Church, and an organ solo, the following program was announced:

1. Address—Hon. Michael E. Sadler, director inquiries and reports, Education Office, London, England.

2. Address—Dr. A. E. Winship, Boston, Mass.

3. Paper—A. O. Wright, supervisor of Indian schools.

4. Trio—violin, Mr. Fred Sustad; cello, Mr. Julius Blakstad; piano, Mr. Russell Patterson—Allegro, *Reissiger*.

5. "Best Method of Affecting Transfers" — A. J. Standing, Carlisle, Pa.

6. "To What Extent do Agents and Superintendents Read the Rules and Regulations" — Superintendent Thomas W. Potter, Salem Indian School, Oregon.

7. "What Steps Should Be Taken to Bring Tuberculosis under Control and to Prevent as Far as Possible Further Infection" — Dr. J. G. Bulloch, Cherokee Indian School, North Carolina.

8. "The Value of Day Schools" — Mr. J. J. Duncan, Inspector, Pine Ridge, S. D.

9. "The Necessity for Books Especially Adapted to Indian Children" — Claude C. Covey, teacher, Pine Ridge, S. D.

The department passed the following resolutions:

Resolved, That we strongly indorse the firm stand on Indian matters taken by the president of the United States in his annual message, in which he stated that we should treat the Indian as an individual, not as a member of a tribe; that the reservation and ration systems are barriers to progress and should be abolished; and that we should preserve the Indian from the evils of the liquor traffic.

Resolved, That we commend the secretary of the interior for his hearty advocacy of industrial training and for his efforts to make the Indian self supporting thru practical means.

Resolved, That we indorse the broad-minded, economical business administration of the commissioner of Indian affairs, and commend the superintendent of Indian schools for making personal visits to the schools, and for her helpful suggestions tending to better the condition of the Indian.

Resolved, That all employes of the Indian service should be subject to civil-service rules.

Resolved, That we extend our thanks to the city, school, and state officials for their kindness and courtesy; to all who have so ably assisted in making our meetings a success; to the people of Minneapolis for their hospitality; and to the press for their full reports of our department.

The following officers were elected for the ensuing year:

President—H. B. Peairs, superintendent of Haskell Institute; Lawrence, Kan.
Vice-President—S. M. McCowan, superintendent of Chilocco Agricultural School, Chilocco, Okl.
Secretary—Miss Estelle Reel, superintendent of Indian schools, Washington, D. C.

The department then adjourned.

ESTELLE REEL, *Secretary*.

PROGRAMS OF ROUND TABLES

SUPERINTENDENTS' CONFERENCE

Chairman, Mr. E. A. Allen, assistant superintendent, Carlisle Indian School, Pennsylvania.

TUESDAY, JULY 8

1. "How to Impress upon the Indian the Use and Value of Money" — Superintendent James C. Staley, Yankton Indian School, South Dakota.
2. "The Present System of Employing Indians in the Service Simply Because They are Indians, and upon Non-Competitive Examinations, is Unwise" — Superintendent Calvin Asbury, Western Shoshone Indian School, Nevada.
3. "The Place of Athletics in Indian Schools" — Dr. W. H. Winslow, superintendent Genoa Indian School, Nebraska.

WEDNESDAY, JULY 9

1. "Industrial Departments Should be Conducted upon Principles of Industry and Thrift" — Superintendent Gaspar Edwards, Ponca Indian School, Oklahoma.
2. "The Necessity of More and Better Equipped Day Schools" — Superintendent Charles E. Burton, Moqui Training School, Arizona.
3. "The Need of Better Equipped and More Experienced Industrial Teachers" — Superintendent Charles L. Davis, Ft. Totten, N. D.

THURSDAY, JULY 10

1. "The Advisability of More Practical Training for the Indian Child in Order to Enable Him to Become Self-Supporting as Soon as Possible" — Superintendent W. H. Cox, Pierre Indian School, South Dakota.
2. "Best Method of Teaching Indian Children to Speak English" — Mr. M. M. Murphy, teacher Kingman Day School, Arizona.
3. "Stock Raising and Dairying" — Superintendent George W. Nellis, Pine Ridge, S. D.

MATRONS' CONFERENCE

Chairman, Mrs. S. M. McCowan, matron, Chilocco Agricultural School, Oklahoma.

TUESDAY, JULY 8

1. "How to Make Details for Instruction in Cooking Classes to Secure the Greatest Benefit to the Largest Number of Girls" — Mrs. S. M. McCowan, matron, Chilocco, Okl.
2. "Means Whereby a Certain Amount of Work Will Be Equivalent in Value to the Articles Issued from the Wareroom, thus Making the Pupils Realize the Value of the Articles Which, under the Present System, They Appreciate so Little and so Freely Destroy" — Miss Bertha Macey, matron, Oneida Indian School, Wisconsin.
3. "Best and Most Practical Way of Teaching Indian Girls to Cook" — Mrs. Emma Duclos, teacher, Phœnix Indian School, Arizona.

WEDNESDAY, JULY 9

1. "In What Way May Returned Students Render Their Services Valuable to Themselves and to Their People" — Miss M. E. Blanchard, matron, Crow Creek Indian School, South Dakota.
2. "Productive Industries for Indians" — Miss Pauline Colby, Leech Lake Agency, Minnesota.
3. "The Physical, Moral, and Spiritual Development of Indian Children" — Mrs. Nannie E. Sheddan, matron, Riverside Indian School, Oklahoma.

THURSDAY, JULY 10

1. "How to Teach Pupils to Plan and Go Ahead with Work without Being Told" — Miss Della Meriwether, matron, Red Moon Indian School, Oklahoma.
2. "Best and Quickest Methods of Teaching Plain Cookery that the Pupil May Be Able to Prepare a Family Meal" — Mrs. Emily L. Johnson, housekeeper, Haskell Institute, Kansas.

TEACHERS' CONFERENCE

Chairman, Allie B. Busby, teacher Crow Creek School, South Dakota.

TUESDAY, JULY 8

1. "How May the Schoolroom Exercises Inculcate Habits of Thrift and Economy" — Miss Carrie A. Walker, White Earth Indian School, Minnesota.

2. "How May the Training of the Indian Child be Made Such that He can Take Advantage of it on the Reservation after Leaving School" — Mrs. Laura H. Ratliff, teacher, Omaha Indian School, Nebraska.

3. "Teachers in the Indian Service Should Keep Abreast of the Times in Their Methods of Instruction and Management" — Mrs. Tama M. Wilson, teacher, Cantonment Indian School, Oklahoma.

4. "The Practical Advantage of More Oral and Less Written Work on the Part of older Pupils" — Miss Lydia E. Kaup, teacher, Mt. Pleasant Indian School, Michigan.

WEDNESDAY, JULY 9

1. "How can We Impress Indian Students with the Thought that Industry and Economy are Necessary to Their Future Existence, Individually and as a Race?"—Miss Allie B. Busby, teacher, Crow Creek Indian School, South Dakota.

2. "More Practical and Less Mechanical Work in the Grades" — Miss Ella H. Gilmore, teacher, Cheyenne River Indian School, South Dakota.

3. "How to Make the Indian See the Importance of Industry and Economy" — Miss Clara McAdam, teacher, Pipestone Indian School, Minnesota.

4. "Teaching Little Children Housekeeping with Dolls as Suggested in the Course of Study" — Miss Jessie Mattoon, teacher, Oneida Indian School, Wisconsin; Mrs. Mollie J. Robbins, teacher, Pine Ridge Agency, South Dakota.

5. "How May the Social, Moral, and Religious Training in an Indian School be Made Equal to that of a Good Home"— Sister M. Catharine Buckley, teacher, St. Mary's Indian School, Wisconsin.

PAPERS AND DISCUSSIONS[1]

PRESIDENT'S ADDRESS

S. M. McCOWAN, SUPERINTENDENT, CHILOCCO INDIAN AGRICULTURAL SCHOOL, CHILOCCO, OKLA.

The Indians cannot understand our civilization in a minute, or a generation; and not understanding it they cannot appreciate it, and will not follow it. Why should we wonder at this condition?

If we, the actual workers among the Indians, will perform our duty to the best of our knowledge, we need not mind the criticisms of those whose mission it seems to be to taunt and denounce. The hardships and toil of the pioneer must be irksome always; and this is especially true of civilization's pioneers. But, by following the policy now in practice of educating the younger generation of our red brothers in industrial pursuits, the fruitage of our toil will be large and comforting. The only danger in this policy is the inclination of some to idolize and idealize the Indian. This danger is real, and present, and fearful. It is a danger I cannot understand, because I can see nothing in him to either idolize or idealize. To me he is simply a crude bit of humanity, intensely human, intolerant of restraint, leisure-loving, dreamy-eyed, mildly antagonistic, passive, non-progressive. My mission seems to me to be to take this crude bit of humanity and by my counsel and example help to make it better, happier, and self-supporting.

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[1] The following papers have neccessarily been abbreviated by the department secretary, for want of room for publication in full.

THE TEACHING OF AGRICULTURE WITH REFERENCE TO FUTURE EMPLOYMENT

L. M. COMPTON, SUPERINTENDENT, TOMAH INDIAN SCHOOL, WISCONSIN

There should be a course of study and a systematic arrangement of the work on the farm, the same as in any other industrial department of the school. This should not only be adapted to the particular locality in which the school is located, but should be so arranged that boys may be given a broader instruction, so that they may apply the knowledge gained on any land that they may happen to own. Climatic conditions should be studied and simple tests of soil made, so that pupils can determine what crops may be raised to the best advantage. I think there is no man in the service in charge of a farm who cannot find time during some part of the year to get his older boys into a class and give them such instruction as will enable them to determine this for themselves with reference to any particular locality in which they are likely to live. Instruction can be given at the same time in regard to clearing, draining, and fertilizing land, which will be of inestimable value to them in the future in this kind of work. What we must do is to teach our pupils to think and plan for themselves.

If pupils live in a country where dairying is the most profitable industry, let them study that intensely, and not leave a stone unturned to get the best possible results.

If the location is remote from markets, where farming is impossible, but where there is plenty of range, teach them what the best breeds of beef cattle are and how to produce them.

What is true in these particular lines is true in all other work in agriculture, no matter what the soil and location may be. The farmer of the present time who is successful is the one who is using his brains as well as his muscle, and this is what we must teach our Indian pupils to do.

DRAWBACKS TO CIVILIZATION AND CITIZENSHIP

H. G. WILSON, SUPERINTENDENT, SAN CARLOS INDIAN SCHOOL, ARIZONA

The individual Indian immersed in American civilization acquires in a very few months the English language, and as quickly participates in the industries about him. One of the greatest drawbacks to the civilization and citizenship of the Indians has been, and will continue to be, their segregation on reservations apart from association and experience in civilization. To uncivilize a civilized white man, the best way is to put him into an Indian camp, or to allow him to drift into it and live there. Whenever we can get rid of reservations and the special care and special treatment, and give the Indian full opportunity to associate with, compete in industry and every other way with the civilized people of the country, his civilization will be quickly accomplished.

If the reservation system is to be continued, day schools should be provided for the smaller children. A day school, properly managed, is an object lesson for the older Indians.

The ration system is another drawback. As long as Indians are fed they will not see the necessity of work. Another is the making too much of an Indian who has a smattering of an education; the remedy is, don't.

Other drawbacks are the opposition of the old Indians to progress; the practice of giving away so much of their property; dancing, and kindred ceremonies; and the prevalence of gambling.

The application of natural laws to the Indian, forcing him to live among whites and to suffer the usual penalties for indolence, improvidence, and carelessness, will in time undo the damage our paternalism has done.

HOW TO TEACH THE INDIAN BOYS AND GIRLS TO BECOME HOMEMAKERS, ESPECIALLY FROM AN AGRICULTURAL STANDPOINT

R. D. SHUTT, INDUSTRIAL TEACHER, TULALIP INDIAN SCHOOL, WASHINGTON

In my opinion, farming and gardening in an Indian school should be conducted in the same manner as on a well-regulated farm; or, to put it in a different way, an Indian school should be fashioned after a well-regulated farm, with some additions, but with no subtractions. After he has secured a good piece of land, the keynote to a farmer's success is intelligent work, work, work, and then a little more work.

While we are making the hotbeds in the spring I try to instill into each boy's mind that the plants are his, and for his garden, not for mine, and that if we raise an abundance of garden truck, in addition to bread, beans, syrup, meat, and gravy, he can have onions, carrots, beets, turnips, lettuce, radishes, and so on thru the list of the more common vegetables. These talks help materially in getting cheerful work from the boys. I usually have the girls, as well as the boys, help care for the hotbeds.

I have had my boys in the garden before sunrise digging cutworms from around cabbage plants, and I have had them in the garden at sundown taking advantage of the cool evening either to irrigate or to transplant some tender plants which could not be planted with safety in the heat of the day. When I want some boys to help me after supper, I call for volunteers, and I have no trouble in getting them. I find that a great inducement to get work from the boys is to give each a few of the seeds for himself. I did this at Fort Hall more than at any other place, and in consequence there were dozens of miniature gardens in almost every conceivable place.

THE VALUE OF THE OUTING SYSTEM FOR GIRLS

MISS LAURA JACKSON, GIRLS' MANAGER, CARLISLE SCHOOL, PENNSYLVANIA

At present Carlisle has 331 girls and 375 boys scattered about in families over eastern Pennsylvania, New Jersey, Delaware, and Maryland, and a few other states. The families into which these children are sent are very carefully selected, each new applicant being obliged to furnish three good references unless he is known to the school, and it is understood that these boys and girls are sent out as students to be trained in right ways of living, as well as right ways of working. They are sent out to become members of the families into which they go, and to attend school with the children of the family. At the present time there are so many more applicants for students than the school is able to supply that less than one-half can be considered. After a girl is placed in a family a monthly report of her progress and conduct is sent to the school, and she is visited by someone from the school in the family where she lives at least twice a year, if she remains out that length of time.

The girls are usually found happy in their country homes, and some prefer to remain out rather than to return to the school. On their return they come back a laughing, happy band, almost invariably in better health than when they went out; they are usually fleshier, with clearer, better complexions, and, with the new clothes they have earned and usually made themselves, they have quite the appearance of a party of white girls.

While absent from the school at Carlisle, students are required to attend the public school at least one hundred consecutive days in the year, and many of them go the whole school year. This is certainly invaluable to an Indian girl. She is the constant companion of her white sister, and forms many warm friendships among the white girls.

There is another important benefit arising from the system. The girls are earning wages that vary from board and car fare to sixteen dollars a month, according to age and ability. Of their earnings they are at present required to save one-half, while they are allowed to spend, under the supervision of the school, the other half. The well-directed use of money which they themselves have earned teaches them what is most needful for them to learn, namely, to depend upon themselves. As soon as they have twenty dollars it is placed at interest for them, and added to from time to time as they earn more. In this way many of them have quite a sum of money to take with them when they leave school.

THE NEED OF HOME SOCIETIES FOR THE ENCOURAGEMENT AND PROTECTION OF INDIAN YOUNG MEN AND WOMEN

JOSEPH C. HART, SUPERINTENDENT, ONEIDA INDIAN SCHOOL, WISCONSIN

The first problem of the young Indian is that of existence. That he will return to his home and people when his education is completed is natural, and, moreover, is fitting. After preparing these young people for living useful lives it is still desirable that some means be found to continue the mental and moral growth begun in the schools. It is at this time, when they have begun to think and act for themselves, that the young people need societies for mutual improvement, assistance, and protection. They have become accustomed to a different life from that of their parents, and they need encouragement to continue the new manner of life. They will still need to keep in touch with the advancing civilization with which it is the aim of the schools to acquaint them.

It is not expected that all students will be equally expert in all branches; but if a group of young men have received a fair agricultural training, and one is especially skillful in the management of cattle and knows how to select and care for the best animals, and another is expert in the care of poultry, and a third in potato culture, it is easy to see that an association of such students, by a little friendly co-operation, may share the results of their training and each benefit by the knowledge of the others with a very small expenditure of time, which will be more than repaid by the increased efficiency of each, to say nothing of the intellectual advantage of the opportunity for meeting with a common purpose and of reviving and perpetuating the influences under which such training was received. With such societies it will also be easy for those interested in these young people and anxious to encourage and assist them to meet them and keep up the enthusiasm for better things which is apt to wane or be lost altogether if not frequently revived.

TUBERCULOSIS—HOW CAUSED AND HOW PREVENTED

I. DR. JAMES S. PERKINS, TRUXTON CAÑON INDIAN SCHOOL, ARIZONA

I believe all agree that the tubercle bacillus is the sole exciting cause of tuberculosis, and that the disease is contagious, and therefore preventable. It attacks human beings and lower animals alike, and may exist in any tissue of the body, but most frequently involves the lungs, and in this locality is known as consumption.

I said the sole exciting cause is the tubercle bacillus. There is, however, another cause, namely, that peculiarity of constitution known in scientific circles as the tuberculous diathesis, which predisposes the tissues to this kind of infection. These two causes must go together in order to produce the disease. When the bacilli become anchored in the body of a susceptible animal they congregate in large numbers and form small new growths called "tubercles," which feel under the fingers like small shot. These small ones coalesce as the disease advances, and form larger ones filled with a cheesy substance, which is coughed up, containing the bacilli, often in enormous numbers.

They do not multiply outside the living body, except under favorable artificial conditions. I have proved in the laboratory to my entire satisfaction that they are destroyed in two hours by the direct action of the solar rays. I would like to emphasize this important fact, that sunlight is the arch enemy of these bacilli, and conversely they live in darkness and dampness and retain their virulence for an indefinite period.

When the sputum containing the bacilli dries, powders, and blows in the air as dust, it becomes the most prolific source of infection, and we see how easily the air of a room occupied by a consumptive patient may become contaminated, unless the sputum has been destroyed. The best way to destroy it is by fire.

As a rule, I do not believe that children inherit the disease itself. but they do inherit the tuberculous diathesis, which predisposes them to tuberculous infection, and then they contract it.

This diathesis may be inherited or acquired. How is it acquired? By unhealthy occupations, requiring long confinement indoors in a vitiated atmosphere, without sunshine and exercise, and the lack of proper food. A prolonged existence in a low, damp country, with a damp soil, bronchial and pulmonary inflammation, and all agents which lower the tone of tissue building too much ; all these act as important factors in the production of the tuberculous diathesis.

An abundance of proof may be brought forward to show that the disease is rare among those who live an outdoor life. I append below a table which I specially commend to the serious consideration of all persons in authority in the school service. It is accurate and reliable.

Out of 1,000 deaths among	farmers,	103 are from consumption
Out of 1,000 deaths among	fishermen,	108 are from consumption
Out of 1,000 deaths among	gardeners,	121 are from consumption
Out of 1,000 deaths among	agricultural laborers,	122 are from consumption
Out of 1,000 deaths among	grocers,	167 are from consumption
Out of 1,000 deaths among	shoemakers,	240 are from consumption

Out of 1,000 deaths among tailors, 290 are from consumption
Out of 1,000 deaths among drapers, 301 are from consumption
Out of 1,000 deaths among printers and compositors, 461 are from consumption
Out of 1,000 deaths among Cornish miners, 600 are from consumption

Indians are specially liable to consumption. I have studied it among them in all of its varied manifestations, with the microscope and without. People in authority in the school service should heed the fact that the indoor life is an exceedingly bad thing for many Indians, and always consult the physician before one is detailed to the shoe shop or tailor shop or printing office, and many will be saved from this cruel scourge.

II. DR. J. G. BULLOCH, CHEROKEE INDIAN SCHOOL, NORTH CAROLINA

The Indian race seems to be especially one in which the seeds of this dangerous malady find a fitting soil for its propagation. In a general way it is recommended that for all those affected sanitariums be established on each reservation, where the afflicted ones can be comfortably housed and well fed. They should be under a competent nurse, who will force them to go into the fresh air at suitable times, also to take appropriate exercise and in every way arouse them from that lethargic condition so prone to seize upon them. Nurses should go among the Indians with power to enforce cleanliness, sunning of bedclothes and whitewashing of premises; and someone should see that the tepees are well built, extra rooms being built for kitchen and storeroom.

Now, as to the school: We must keep out children who are affected with scrofula, and put them in a separate school with a hospital ward attached. Every school should have a hospital and trained nurse, for otherwise it is impossible to give patients proper food and care. More attention should be paid to the feeding of the children, for, tho the government gives enough, it is not prepared in sufficient variety. Floors should always be sprinkled to prevent the danger from dust. Stables and pens should be a considerable distance from the dormitories, and kept clean. Cattle should be examined for tuberculosis. Water-closets in the dormitories are a most pernicious evil.

OPPORTUNITY AND JUDICIOUS DIRECTION FOR THE INDIAN

MR. C. W. CROUSE, UNITED STATES INDIAN AGENT, WHITE RIVER, ARIZ.

Opportunity, for the Indian, is a suitable combination of conditions from which he may succeed; but success means to sacrifice, and this he must make to succeed. Ninety per cent. is a fair estimate of the Indians who must find an opportunity to earn a living in farming and herding. The conditions suitable to afford him an opportunity to succeed as a farmer are good soil, heat, and moisture. The factor good soil is not so necessary in the herding industry, for wild grass will grow among the rocks on the mountain side almost as well as in the valley.

I know of no other factor or means more effective to change such conditions than the service of a healthy, determined, patient, intelligent field matron. With a matron of tact, a Dutch oven becomes a cook stove or a range; a washtub, board, and flatiron become a washing machine and mandril; with a few simple remedies in her hands she becomes a physician; if she is enthusiastic in her work and really sympathizes with them in their ignorance and poverty, she becomes an effective moral guide.

Judicious direction for the Indian implies that you must get close to him; secure his confidence and his good will; then the training becomes easy and pleasurable. Believe me in this: no industrial teacher can succeed if he gives his directions across the fence from an easy carriage, or from the saddle; and neither can he succeed well in the garden or field if his dress is suitable for the pulpit or the platform while giving the directions.

THE ADVANTAGES TO THE PUPIL OF CLASS-ROOM WORK AS OUTLINED IN THE COURSE OF STUDY

MRS. LUCY P. HART, TEACHER, ONEIDA INDIAN SCHOOL, WISCONSIN

The great advantage of having the industrial work taught in the class-room and with the class-room work is that both parents and children soon get the idea that to be a good cook, laundress, or seamstress requires study and preparation. They are not doing it solely to get so much work done that has to be done, but are really learning to do it, and there must be something to learn or the teacher would not spend time in teaching it. The idea is given that to become a good cook or to do any kind of domestic work well requires study and thought as well as to become a teacher or a clerk. In this way the child gradually loses the idea that domestic work is degrading and not to be learned if it can be helped. The literary and industrial work go hand in hand and soon lead the child to see that it is quite as important that she learns to cook, wash, and iron as that she learns to read, write, and work in arithmetic. By being made a part of the schoolroom work the industrial features are raised in the estimation of the child and are thus made more attractive.

THE EDUCATION OF THE INDIAN SHOULD BE ADAPTED TO HIS NEEDS

MISS ALICE ROBERTSON, SCHOOL SUPERVISOR, CREEK NATION, I. T.

We should not try to make the Indian too much of a white man. Instead of tearing up the native plant by the roots and planting entirely anew, we should endeavor to take it as it is and graft upon it a new life that shall blossom and bear rich fruit. Let the Indian retain all of his native ways that do not interfere with his becoming a good, industrious citizen.

Endeavor to make the children appreciate the opportunities they are being given in the schools. Too many of them consider their education as a right to which they are naturally entitled from the government.

Again, be careful not to lead the Indians to despise or be ashamed of their race, but rather encourage them to take pride and glory in the prowess of their past, that they may be inspired to do themselves and their race credit in the future. They will be the best citizens who are proud of the blood that courses thru their veins.

As every Indian will be a landowner, it is to farming, stock raising, dairying, and their supplementary industries, such as carpentry, that we should give most attention in training them for happy, successful futures.

THE VALUE OF A LARGE AGRICULTURAL SCHOOL IN THE INDIAN SERVICE

S. M. McCOWAN, SUPERINTENDENT, CHILOCCO INDIAN SCHOOL, OKLAHOMA

Childhood is a condition of human clay thoroly moldable or marrable. If we would mold aright, we should follow as nearly as possible the child's natural desires and inclinations as to his future vocation, and develop along simple evolutionary lines. Here, then, is where a large agricultural school is valuable. If properly conducted, such a school can and will inculcate habits of thrift, awaken ambition, put the spurs of energy to the lagging will, purify the passions, enthuse the mind, and banish sloth.

The Indian is successful as a farmer, and his success is due to his wisdom (the fruit of long experience) in the selection of soils. Soon the Indian will settle on his allotment, and it is here where more scientific knowledge than he naturally possesses will become essential to success.

He must know, if his home be in an irrigated country, when to apply water, and how much. He must know what kind, and how much, of seed to sow; how to prepare the seedbed; how to nurse the struggling plants; and when to cultivate. The Indian as a permanent abider on his land must know how to rotate his crops, and why.

An agricultural school should stimulate the Indian's natural inclination and desire to raise grain and stock, and prepare him to realize the most from his labor of hands and brain. You cannot chain the Indian child to books and graduate a successful farmer; but daily practice at hand labor, intelligently directed, will not only produce a skillful workman, but will develop and profit his mind as well. It will change a pauper into a producer.

Country life is conducive to virtue and quiet, peaceful family associations; and in the family rests the surety of progressive civilization. The school that does the best for the Indian is the one that cuts away all educational millinery, that discourages an easy life, that compels hard manual labor, and holds out the promise of competency to those who toil.

The most valuable school will bring its student body up as our farm boys and girls are reared.

CORRELATION OF THE SCHOOLROOM AND FARM WORK

E. C. NARDIN, SUPERINTENDENT, MT. PLEASANT SCHOOL, MICHIGAN

The schoolroom aims to give to the pupil facility in number combinations and to cause the discovery of number relations for the sake of the power to control environment which definiteness in expressing quantity and accuracy in measurement makes possible.

When the farm and schoolroom are correlated the first problem in assigning to each pupil a garden plot is one of number.

The first lesson in agriculture for the year comes with the approach of spring. While the temperature of the outdoor air is below the freezing point, the farmer makes a hotbed and maintains a summer temperature beneath his glass which lengthens the season of plant growth six weeks or more. The pupil counts the plants on a unit area of his hotbed and computes the number of plants in the whole. Every measurement of seed per acre, growth per day, yield per acre, per cow, or sheep, is a better problem for the development of power than those of the text-book in arithmetic.

The study of agriculture provides the serious phase, a real end to be gained for every exertion. A pupil in possession of seeds and a rich garden spot has the essentials which, if properly combined and directed, will produce pocket money.

Writing in the schoolroom is a mechanical exercise unless the pupil is recording facts of value which he puts into writing for preservation or to convey to others. The discoveries which the pupil makes in the study of farming are precisely of this valuable nature, requiring careful record that may not be lost.

WHAT IS OUR AIM?

E. A. ALLEN, ASSISTANT SUPERINTENDENT, CARLISLE SCHOOL, PENNSYLVANIA

The president of one of the largest schools for colored youth in the South, a man born a slave, and, as he says, a "full blood," said in our chapel last winter: "My big hands have never been in my way; my flat nose has never been in my way; my kinky hair has never been in my way; my black skin has never been in my way—nothing is in the negro's way but himself." If this is true of the black man who so lately bore the owner's brand, there must be hope for the Indian, who is subject to none of the social discriminations of the other man, but is welcomed among the best people and given all the opportunities that the twentieth century brings to us.

The red man is an American; let us put him where the American should be placed for his training — into our public-school system, where he may, nay must, sit at the feet of the same teachers and in the same environment learn the lessons that have made the men of our race. He must meet our industrial conditions. Let him learn how to take the waves and rise with them, from those who know how. He cannot live on the memory of what he once has been. A decayed aristocracy endeavoring to subsist on the proceeds of a farm rented to a white man with the certain prospect that his children will have nothing to rent is a condition that should move us to positive action, heedless of the dreamer's talk of an artistic life. All that is worth preserving of the native American will endure and gather strength, and the rest will quickly perish from the earth it cumbers.

THE ADVISABILITY OF HAVING SCHOOLS OF MODERATE SIZE IN ORDER THAT PUPILS MAY RECIEVE MORE INDIVIDUAL TRAINING

H. M. NOBLE, SUPERINTENDENT, GRAND RIVER INDIAN SCHOOL, NORTH DAKOTA

Indian children require more individual attention than white children, both in and out of the schoolroom, owing to ignorance of the language and larger need of soul culture. The day-school teacher and his wife gathering their little brood of from twenty to twenty-five about them every day and instilling into their minds the elements of a new civilization, language, cleanliness, order, necessity for work, love of home, etc.; visiting the parents' homes saddened by sickness and death, thereby creating a mutual bond of sympathy between the pale face and the red at a time when every human heart craves sympathy — this is the individual training that counts. It is the proper method of establishing a right understanding of the true relationship which should exist between the Indian parent and child and the civilizing agencies which the white man thrusts upon him. Thus the parent comes to understand the aims and purposes of the school, they grasp small scraps of civilization, and the transition to the small boarding school in the proximity of home is made naturally and easily, for the parent's heart can still be gladdened by the sight of the child occasionally. As the pupil advances in knowledge in the reservation school, portions of his knowledge will continually find expression in the home, as a table made for the father, repairs on his harness, etc. As sister Murphy expressed it, "after all we are training the child for the home." This admitted, that school which trains most effectually for this life is the school which does most toward uplifting the tribe, the school in living sympathy with the reservation, the reservation school.

NEEDED CHANGES IN INDIAN SCHOOLS

A. O. WRIGHT, SUPERVISOR OF INDIAN SCHOOLS, WASHINGTON, D. C.

When Indian schools began to be organized in earnest, it was perfectly plain that the Indian children should be taught how to work as well as how to read, and the effort has been made to furnish in the schools the industrial training and the home life which the white farmer boy or girl gets out of school hours. Habits of industry and cleanliness have been taught, and new wants for better clothing, food, and housing have been created, which are the beginning of a deep desire for civilized life.

Many of the younger children can be educated in the day schools at their homes. In some few cases these are public schools in which white and Indian children meet; in others such schools might be organized with little trouble. A large number of the Indian children under twelve years old could now be sent to day schools. At the age of twelve or thereabouts children have reached the stage where they can take up industrial work and instruction. These can best be taught in large schools. Enough industrial work should be given to fit the pupils for farmers and housekeepers. The non-reservation schools should not receive any little children, except where there are no day or reservation schools; and it would be wise to have a general rule forbidding non-reservation schools from receiving any children under twelve, except as specially authorized by the commissioner. Properly, all transfers from reservation to non-reservation schools should be in the nature of promotions. The most advanced pupils should be transferred from reservation and day schools, and their places supplied from the children on the reservation not in school.

BEST METHOD OF AFFECTING TRANSFERS OF PUPILS

A. J. STANDING, CARLISLE, PA.

As a preliminary measure I would say that from the first entering school the prospect of a future chance at a higher grade of school should be presented as something desirable and honorable, to be accomplished when a certain age or degree of advancement has been reached. There should be a proper understanding as to who shall be eligible for transfer and who not, as to health, age, blood, and grade, but with some latitude to meet special cases. A register of eligibles for transfer should be kept at each agency or school, parent's consent obtained, and the desired school designated.

Non-reservation schools should transfer to training schools those who give promise of using to advantage the greater opportunities when they have finished their term or course at such school. No better method at present appears than co-operation between agents of non-reservation schools and local agents and superintendents, the visiting agent proceeding only on authorized lines, and using discretion.

TO WHAT EXTENT DO AGENTS AND SUPERINTENDENTS READ THE RULES AND REGULATIONS?

THOMAS W. POTTER, SUPERINTENDENT, SALEM INDIAN SCHOOL, CHEMAWA, ORE.

The rules of the department were made for the protection of the interests of the government and of the Indian, and for the successful and systematic conduct of its business. It is our imperative duty as faithful servants to obey cheerfully orders and rules, whether written twenty-five years ago or yesterday, so long as they relate to our work. When we consider the great variety and magnitude of business which the Indian office must control, the large number of employes with more or less business ability and good judgment who are trusted to do this work at long range, and the different conditions and requirements that must be met in different reservations and localities, we are forced to see the wisdom and necessity for every rule made.

Probably the chief fault of ambitious agents and superintendents is in making improvements and purchases without first obtaining authority, and, after failing to get the approval of the office, in endeavoring by various irregular methods to settle the indebtedness thus incurred. This is a very dangerous practice. The rules and regulations make ample provision for all emergencies. They do not, however, permit officials to make other than emergency purchases without first obtaining the approval of the office. Therefore, it is very necessary that we endeavor to cultivate the ability of looking ahead and correctly estimating the future needs and requirements of our schools.

To carry out these rules it is, of course, necessary that we read and study them carefully and diligently, determined to master them fully and understandingly.

THE VALUE OF DAY SCHOOLS

JAMES J. DUNCAN, DAY-SCHOOL INSPECTOR, PINE RIDGE, S. D.

The day school is, I think, the most powerful factor in Indian civilization. The teacher and housekeeper have opportunities for exerting a moral influence by instruction and example that none else have. The Indian learns by visiting the school and the teacher's house to love the beautiful and appreciate the orderly arrangement of things and the value of promptness. His children carry home to him each day the lessons they have learned at school. They put in practice what they have learned at school in the way of home decorations and arrangements in keeping the home neat and clean. The day schools reach the home and affect everything there, doing it so quietly and unobtrusively that the parents and older members, who would resist active influences, yield and find themselves falling into a better life without knowing it.

By visiting the different homes and studying their conditions the teacher and housekeeper may be the means of greatly influencing these conditions, either directly or thru the pupils. The gardening and dairying that can be successfully carried on at a day school can be just as successfully carried on in the vicinity of the school.

The day schools are intensely practical. The common bath-tub, and washboard and tub, flatiron, needle, hoe, and rake, are made use of, and the parents see the practical results of their use. Children go home at night in citizens' dress, thus introducing it into the camp.

THE NECESSITY FOR BOOKS ESPECIALLY ADAPTED TO INDIAN CHILDREN

CLAUDE C. COVEY, TEACHER, INDIAN SCHOOL, PINE RIDGE, S. D.

After careful study and observation in the field of Indian work, the superintendent of Indian schools has prepared a course of study especially adapted to Indian education. This is indorsed by the best educators. Since, then, we need and have a special course of study for Indian schools, it must follow that we should have text-books in line with this course and especially adapted to Indian children. Many books prepared for use in white schools may meet the requirements of the Indian school. The first essential is simplicity—simplicity of language, style, and subject-matter. Another is interesting subject-matter and method of presentation. This is a requisite of all texts; but what would interest the white child would often be dull to the Indian, and *vice versa;* hence again the necessity for specially prepared texts.

In the Indian school—especially the lower grades—some of the best results obtained are from home-made text-books; that is, lessons worked out by the teacher and pupils. These lessons include stories of industries, geographical excursions, and nature-study lessons. This gives an opportunity to learn words that actually occur in the everyday life of the child. The lessons should be talked over, written, read, and preserved. The child is thus given a vocabulary fit for everyday use.

It is almost impossible for teachers to prepare these home-made text-books properly, because of their lack of time and the necessary reference books. If we had books specially prepared, giving subject-matter in convenient form, and models of presentation in nature study, geography, history, etc., for the lower grades, it would save teachers much extra work and also improve the teaching.

NEWSPAPERS IN INDIAN SCHOOLS

HON. W. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION

One of the most important, perhaps the most important, object in the school of modern times is to prepare the pupils to read the printed page. No eloquence on the part of the teachers, no talking or demonstration, no pouring out of information, is or can be a substitute for teaching the child how to read and how to understand what he reads. The child who learns how to read becomes his own teacher. By reading the printed page he can find the most systematic and the most accurate presentation of the knowledge that he seeks. He can look up information in the encyclopedia, in a history, or in an elaborate treatise. On acquiring skill in using the printed page the pupil emancipates himself from dependence on a living teacher. The lecturer goes from paragraph to paragraph, and the hearer does not have sufficient time to recall and understand. The book waits on the pupil's leisure. If he does not understand on the first reading he reads it a second time, and a third time. If he finds himself weary and dull-minded he lays aside the book and resumes it in the fresh period of the morning.

There are two kinds of attention: that of alertness and that of absorption. In listening to the lecturer one must be alert. He must keep up with the reading and not allow his mind to dwell on the sentence that he hears so long as to lose the sentence which follows it. This is all well enough for half of the purposes of attention. But the other half is at least quite as important. The student must learn to give an analytic attention, forgetful of what is present before him, but going down step by step into the depths of the subject, tracing back the casual chain of explanation down to the tenth, the twentieth, the fortieth step. The printed page encourages this cultivation of absorptive attention, whereas the oral method of teaching encourages alert attention, which watches carefully what is going on before it, but does not go down step by step into a consideration of the causes and explanations of what it sees and hears.

In reading the printed page one becomes "eye-minded" as well as "ear-minded." The eye-minded person thinks in printed or written words. The ear-minded person recalls sounds and tones. The eye-minded person can think accurately because he finds and learns in print a technical vocabulary that is not used in colloquial speech. The newspaper brings the citizen into a greater world of public opinion than he can find in the oral speech of his village or community. The newspaper elevates village gossip into world gossip. It follows that the newspaper reader acquires a habit of adjusting himself daily to a view of the world. The person who does not read the newspaper limits his adjustment to his immediate community.

It is a wonderful education to be able to think sympathetically on great human events. The laborer in the city of Minneapolis, thru the printed page of the daily newspaper, acquires an interest in the life of the inhabitant of China, or of Russia, or of South Africa. It is one of the best ways to educate the heart to get the person interested in his fellow-men, for sympathy follows a knowledge of their deeds. The newspaper gives one a reflection of the sympathies of his fellow-men. He notes that one person has one class of sympathies and another a different kind. When the pupil can motive the different and strange ideas, and understand how that which is not his own method of doing things may really seem to be the best method to his fellow-men, he broadens his mind into toleration. He reinforces his mind with the ideas of other people, and the newspaper is one of the best means of this kind of education, because it continues thru the year. It makes the citizen a spectator in the great drama of life that is unfolding before him on the world-stage.

Every Indian school should have the newspaper. The pupil should read first that which interests him. He will go from that to the far-off events of the world, according as he grows in intellectual capacity. Pictorial newspapers are a great help to those coming up from a tribal form of government to the most civilized form. The most civilized government makes most of the individual and teaches him how to think and act for himself in the light of all human experience. Before the newspapers came into so much vogue there was more village gossip in regard to small and personal things. The worst novel is not so bad as village gossip, even the gossip that one finds in the best families. Let the Indian child read the newspapers. He works from day to day acquiring a knowledge of the public opinion of the Anglo-Saxon race, and then he comes to see how the other races think. Thru presentation by picture and by word great events can reach all classes of intellects.

You may teach the Indian scientific facts; you may teach him history and literature; but if he does not get interested in the newspaper and become a reader of it he will not come into the Anglo-Saxon world of public opinion. He will not become educated in the highest sense of the word.

ABSTRACTS OF GENERAL ADDRESSES

I. NICHOLAS MURRAY BUTLER, PRESIDENT OF COLUMBIA UNIVERSITY

It is a pleasure to come before this department to testify publicly to my profound personal interest, and that of university students and teachers in general, in the valuable and significant work which you have made your own. Your work has for us an interest both pathetic and inspiring—pathetic, because of the many things we should have done and the many things we should have done differently; inspiring, because you are applying the most modern educational methods to the uplifting of the descendants of the aboriginal people of this country.

I should like to emphasize just one fact in relation to this work. Every professionally minded person in our modern life is prone to exaggerate the importance of his own work and that portion of the field into which he himself is called to labor. The teacher is apt to treat the school as an end in itself and to try to make it bear the entire burden of the educational process. My view is that the function of the school in education is rather restricted and definite, and that we must depend for the completion of its work upon the educational influences of those other great human institutions which work in alliance with the school — the church, civil life, and the family. The child who comes to school to be educated, whether Indian, Teuton, or Anglo-Saxon, is not thereby taken out of all his natural and inevitable relationships and made a new unit in a new mass. He carries with him his family relationships. All of these relationships are educational in the highest sense. We only get a sound and scientific view of the task of the educational profession when we understand that those other institutions must co-operate with the school and assist it in the performance of its functions. We are apt to err in overloading the school with non-scholastic duties and thinking that if the school does not do a thing it will not be done at all. It is of the highest importance not to deprive other educational influences of their proper parts in this process.

II. DR. MICHAEL E. SADLER, DIRECTOR OF INQUIRIES AND REPORTS, EDUCATION OFFICE, LONDON, ENGLAND.

The very problem the solution of which the Indian educators have come together to promote is all over the world the question to which statesmen and educators are giving their closest thoughts. The Indian must be educated not only thru books, but by doing things with the hand—by industrial training. And not only is industrial training important for Indians, but it is also equally essential to the best results among white people. Working with the hands develops character and mental strength. Several centuries ago the villagers of England were skillful and artistic smiths and artisans, and made all their implements. During that period they were the mental giants of the age.

III. DR. A. E. WINSHIP, EDITOR, JOURNAL OF EDUCATION, BOSTON

Systematic education is useful only as a preparation for the school of life. The test of what a boy accomplishes in school is what he proves to be on the street. No school is good that sends bad boys on the street. This is equally true in the city and country, in the parochial and Indian school. The test of work among the Indians must always be the industry, thrift, and character of the Indians. The way they learn in the school of life determines what they have learned in the organized school. It is useless for anyone to teach the Indians who does not believe that they can be fully prepared for the school of life.

IV. MOST REVEREND JOHN IRELAND, ARCHIBISHOP OF ST. PAUL

I have always believed that the general intention of the national government in regard to the Indian was for fairmindedness and justice. But not always, in the westward rush of population, was the government able to see that its kindly intentions were faithfully carried out. Today, as at no previous time, the American people have the consciousness of their duty to the Indian. The intentions, both of the people and of their government, are the best. The amelioration of the condition of the Indians is earnestly sought out. Educational agencies are set to work; money is spent without stint. We are encouraged to look forward with bright hopes to excellent results. May we not be disappointed!

I honor you, ladies and gentlemen, teachers in the Indian schools: you are engaged in a great and noble work. The future of a whole race is in your hands.

The Indian needs a practical education. It is well for him to know that he must live as the white man, and, consequently, that he must learn to work. He must be taught industry. The love of work is at the basis of all civilization. Tell me how much a people love work, and I will tell you how high they may rise. Teach the Indian to love work, to love the kind of work that is before him, to learn how to do it; how to beget in himself a sense of self-reliance.

Teach the boys a trade of some kind; teach them farming, which, of course, is for them the most important trade of all. Teach the girls the ordinary industries for which they are fitted, and which they should practice. I believe that teaching the girls will do more for the elevation of the race than teaching the boys. Let the spirit of the home be what it should be, and the father, the brother, the son, will be all right. Teach the girls to take care of the home, to make it attractive. Teach them cooking; teach them neatness; teach them responsibility. Teach the girls to milk the cow, to care for it, and to make butter; teach them to have a vegetable garden and to rear poultry; teach them how to serve a nice appetizing meal for the family — do this and you will have solved to a large extent the question of Indian civilization.

Teach your pupils good morals. At the basis of all social elevation, of all civilization, there must be good morals; else, the structure you fain would build is in the air without support upon which to rest, and it quickly topples over and is shattered to pieces.

How useful, how necessary to good morals — indeed to all elements in a true civilization — religion is I need not strive to prove. It is not the province of instructors in the employment of the government to teach formally religion. This much they should do: to inspire respect and love for the fundamental principles that underlie religion, for the feelings of the soul that are its life's blood. This they should do — as the government does — allow pupils free access to authorized teachers of religion, never encroaching upon the rights of individual conscience, never discouraging, always encouraging, fidelity to the voice of conscience. There is no conflict, there should be none, between church and government. Church and government have each a special sphere, that of the one helps the other; both tend to the greater good of the wards upon which love and labor are being spent.

V. HON. ALFRED BAYLISS, SUPERINTENDENT OF PUBLIC INSTRUCTION OF ILLINOIS

"If you know how, teach them (the boys) to be good workers," pleaded an eloquent Indian orator, addressing an assembly of teachers. "One typical thing in the modern school movement is that which passes under the name of 'manual training,'" says Mr. Dewey.

Teach the Indians to become good citizens. Home-making, cleanliness, beauty of person and surroundings, cooking, sewing, sawing, driving nails, industry, economy, accumulation of capital, are elements in good citizenship. The young Indians should be trained to these, and somehow be made to feel that they are citizens of this country and as such have duties as well as rights under the law which as mere wards of the government they did not have. Because home is the fundamental institution of civilization, and vocation the fundamental condition of good citizenship, I would impress them very strongly with the idea that when lands are allotted to them in severalty they should hold fast to their titles. Teach them that the "finest country in the West," as the young orator I have referred to termed Indian Territory, should be held by the people to whom it belongs. I would saturate them with that idea, for quarter-sections of good land will never be so cheap again.

The significance of the elementary branches as ordinarily taught need not be lost sight of. There, as elsewhere, they are keys and instruments, indispensable to efficient participation in civilization. Like every school, the Indian school should have its library, but more than others it should have its garden, shop, tools, textile industries, and kitchen.

VI. Z. X. SNYDER, PRESIDENT, STATE NORMAL SCHOOL, GREELEY, COLO.

In determining a course of education for the Indian, it is necessary to study him from the historic and comparative standpoints. It is necessary to study him from the historic standpoint in that it will find his place in the evolution of races—humanity. And it is necessary to study him from the comparative standpoint as it enables the similarities to and differences from other races to be considered. The Indian is living largely in the nomadic and military periods of his life, and self-preservation is fundamental and very persistent in his nature. Between soul and intelligence there is a difference. The soul of the Indian is different from that of the Caucasian, and a generation cannot change it. A generation cannot change the soul of any person much; it may change his intelligence, but it takes generations to work intelligence up to soul. The fundamental impulses in a human being, the Indian as well as any other, are: self-preservation, activity, wonder, wander, ownership, knowledge, and sympathy. In the training of the Indian his nature should be considered; not only the nature of his soul, but the nature of his impulses. Industrial education should be the central notion in his training, and should include the useful trades, the native handicrafts, farming, and nature study. In the training of the intellectual nature the industrial work is very important in conjunction with such literature as touches his sympathies; while in the training of his social nature, give him a chance to do the things that he likes that are helpful to others, and have him plan with others.

One who attempts to teach an Indian should be filled with the spirit and love of humanity, and be able to merge his life into that of the Indian. He must live with the Indian and must be an Indian in spirit, that the true process may go on. The government should establish normal schools especially organized to prepare teachers for the Indian service.

VII. AUGUSTUS S. DOWNING, PRINCIPAL OF TRAINING SCHOOL FOR TEACHERS, NEW YORK CITY

In discussing the Indian question we must use the positive and definite information which we have in regard to what is being done.. The question in my mind is whether or not, in the attempt that is being made to civilize the Indian, we are trying to make a white man of him instead of developing in him as an Indian that which is best. I cannot see any reason why an Indian should not be proud that he is an Indian. I believe in work. I believe in teaching the Indian to work; but I believe in teaching him to work among and with his own people, within his own surroundings. Don't undertake to remove the Indian from the reservation and put him into some civilized community. Leave him where he is and give him a chance to be a great big man, a great Indian among his people, rather than a great politician among the white people. Let the Indian woman endeavor, not to be the highest society lady among the whites, or the most beautiful dancer, but the most graceful, loving Indian wife, or Indian sister, or Indian mother on the reservation.

We often hear that the government is doing too much for the Indian —giving him land and schools and making him a lazy man. The government is doing too much for the Indian only when it undertakes to put upon him the peculiar civilization of the white man. I thank God that it is the good fortune of the Indians to have placed in charge of Indian education a woman who believes that the Indian should be taught those things which will make him more useful as a worker among his own people; that will enable him to contribute something to the wealth of his particular nation—not necessarily wealth of money, but wealth of life. If the Indian boy can be taught to do something in the right way, so that his life will be richer and the life of his nation will be richer for his having lived, a great work will have been accomplished for him.

ROUND TABLE CONFERENCES

SUPERINTENDENTS' CONFERENCE

[ABSTRACTS OF DISCUSSIONS]

HOW TO IMPRESS ON THE INDIAN'S MIND THE USE AND VALUE OF MONEY

JAMES STALEY, SUPERINTENDENT, YANKTON INDIAN SCHOOL, SOUTH DAKOTA

No tribe or group of people has ever acquired habits of thrift while given a gratuitous support. The colonies established by Baron Rothschild in Palestine, where homes and money were furnished the settlers, and by Montifiore in North Dakota, where there was tillable land in abundance, and money furnished to aid in building houses, both ended in failure. Contrast these with the Salvation Army colony established by Booth Tucker in Colorado, where each man was required to pay interest on all money borrowed, the principal to be paid back in ten years. At the end of three years many had paid for their homes. Why this difference? Because in the latter case the people knew that their future welfare depended on their own efforts, and not upon the munificence of others. The pursuance of the policy adopted by the office of Indian affairs during the past year has been productive of more good than all the theories that have been advanced during the last century. The man who shovels gravel all day to earn a dollar and a quarter needs no instruction as to the "value of a dollar," or the "use of money."

THE PRESENT SYSTEM OF EMPLOYING INDIANS IN THE SERVICE UPON NON-COMPETITIVE EXAMINATION IS UNWISE

CALVIN ASBURY, SUPERINTENDENT, WESTERN SHOSHONE INDIAN SCHOOL, NEVADA

In our treatment of the Indian I think it is our duty to do for him what will tend most to the development of his independence and courage to meet the difficulties of life as he he finds it; and we hold that this can never be done so long as he is treated differently from other men by reason of his being an Indian. A position in the Indian service is the goal to which many young Indians, men and women, have looked while going thru school, and this position they have expected to secure by their blood rather than by their preparation. To any such, an irreparable injury has been done by diverting them from the noble end of striving to meet the world as men and women and not as pampered Indians. The standard and requirements for positions in the service should be the same for the Indians as for the whites. The employe should be chosen and retained solely with a view to his inclination and ability to render efficient service.

THE CONDUCT OF INDUSTRIAL DEPARTMENTS

GASPAR EDWARDS, SUPERINTENDENT, PONCA INDIAN SCHOOL, OKLAHOMA

Farming and stock raising is the all-important subject for the Indian. It is the primary and primeval occupation of man. It is the only resource of at least nine-tenths of the Indians. All of his property is land and live stock. He should be expected to utilize his own property first.

The work as laid out in the course of study can be supplemented in reservation schools very nicely and very profitably. The individual work at school is excellent for younger pupils. But in many places market for garden vegetables is poor, and the larger boys need something more profitable. Why not send him direct to his own farm? If that is too far, rent it and lease land near the school. If land can possibly be had, each large boy should be required to cultivate a moderately large crop. Require the same that is required of him on the school farm. This will give him some returns for his labor. After a pupil is worth more than his board and clothes, he should be paid for it. Keep them at school, furnish them employment, drop them from the gratis-roll, compel them to work, and let them bear their own expenses. That would be real training in economy.

To secure economy and thrift, let there be furnished competent industrial employes; let the superintendent hold the employe responsible for all waste; inspect him closely on this point; require an account kept in each industrial department for materials used, salaries, allowance for pupils' services, tools, etc. Set against that the output of that industry. Close the account at the end of each quarter. If the accounts show a loss for the entire year, without good cause, it is time something should be done.

THE PLACE OF ATHLETICS IN INDIAN SCHOOLS

W. H. WINSLOW, SUPERINTENDENT, GENOA INDIAN SCHOOL, NEBRASKA

It is now a well-recognized principle that the first requisite of success in life is to be a good animal. Physical health aids in mental and moral health.

The first requirement is to develop bone and muscle; to develop sound, strong lungs that will purify a large blood supply; to secure a healthy stomach; to train a heart that is regular, and strong enough to supply every cell with pure blood. This is needed as a basis upon which to build manhood and womanhood that will stand hard work. Girls should be given the training equally with the boys.

Indian boys are too liable to get a wrong idea of the importance of games. The applause of a good play in baseball or football is taken for more than it means. Again, games as at present very largely conducted do not serve their proper purpose. Only the physically perfect, the strongest, can hope to win a place. Of necessity, the boy that needs the training worst must be left out.

Running, jumping, vaulting, etc., should be a part of the regular training. But the school should direct them all, and none of them should be allowed to assume control of the institution. Too great ambition to meet those of an entirely different class should be carefully curbed. Games in the school are of prime importance, and the best games for our purpose are those which put the greatest number in training.

THE NECESSITY FOR MORE AND BETTER EQUIPPED DAY SCHOOLS

CHARLES E. BURTON, SUPERINTENDENT, MOQUI INDIAN SCHOOL, ARIZONA

The Indian day school is like the common public school of the white people. It touches the pulse of the Indian village, and uplifts, to a greater or less extent, the public conscience and public pride of the adult Indian.

The Indian mother gets lessons of thrift and cleanliness from the teacher and his family. The father gains ideas from the teacher which benefit him along the lines of better farming, better stock raising, better clothing, better living. Many savage practices and ceremonies are abandoned because of the proximity of a Christian teacher and family whose sense of modesty and propriety would be shocked. I believe that a man and wife should preside over each day school. The man reaches the men of the village, and his wife reaches the women.

It is an undeniable fact that a large majority of the people of the United States get all the education they ever get in the "little red schoolhouse," and so the great majority of the Indian youth will be educated in the little day school or forever remain without education and practical training which will fit him to take his place in the American citizenship—the goal of all our efforts.

THE NEED OF BETTER EQUIPPED INDUSTRIAL EMPLOYES

CHARLES L. DAVIS, SUPERINTENDENT, FT. TOTTEN INDIAN SCHOOL, NORTH DAKOTA

When the native Indian child enters school it is necessary to begin at the bottom—to instill habits of industry, to impart skill and readiness in work and the use of appliances, and oftentimes to break down native prejudices which a child may bring with him against doing certain kinds of work. All this must be done that each child may be prepared to earn an honest livelihood in later years.

To accomplish the desired result requires employes of the utmost patience and of ample skill. I would not recommend that the schools seek the services of professors, but they should be thoroly skilled workmen in their particular line of work, and be able to teach others.

To promulgate any rule by which to select suitable employes would be quite impossible. But when we meet with an industrial instructor who within a few months enables his pupils to do with their own hands work such as he does himself, and can tell why they do it, then we know success has been obtained. Girls who cut and make their own clothes have been instructed by a competent seamstress. The cook who can take a day off, leaving girls in charge, and without the other pupils observing her absence, has shown commendable skill as an instructor. When the boys on the farm detail can tell you when and how to plow to preserve the fertility of the soil; can distinguish between different breeds of cattle as to their suitableness for dairy or beef purposes; can and do keep the work going and look after the multitudinous duties of that department when the farmer is absent—such boys prove the efficiency of the instructor better by far than a diploma from the best agricultural college.

THE ADVISABILITY OF MORE PRACTICAL TRAINING FOR THE INDIAN

WILSON H. COX, SUPERINTENDENT, PIERRE INDIAN SCHOOL, SOUTH DAKOTA

There must come a time in the history of the Indian when he must be placed upon his own responsibility. Many Indians are offering their services to work on farms, thus showing that they are beginning to realize that self-support is the ultimate condition to which they must attain. The present great demand in Indian education is industrial education, a training that will bring self-support, learning how to do those things which will furnish clothing, food, and shelter. The central thought in all our school work should be to impress upon the minds of the pupils the dignity of labor. This they do not learn at home. Each pupil should be taught at school that he has duties of his own to perform, which are necessary to his own success; that thru his and others' successful performance of duty comes the success of the school. Teach this so practically that the lesson will be carried into home life.

THE BEST WAY TO TEACH ENGLISH TO INDIAN CHILDREN

MATTHEW M. MURPHY, TEACHER, MARICOPA DAY SCHOOL, ARIZONA

If I had my own way I would begin with the Indians' own home. Reforms may be introduced into small communities that would be inapplicable to large ones. For that reason I would divide every agency into communities of a few hundred each. In each community I would place a day school corresponding to the white district school; I would place there a teacher and such other employes as conditions indicated; I would place the community in charge of the teacher or other employe, and make him responsible for the community as well as for the school. Then I would begin the teaching of English. It would be to the interest of every family to learn English, as discrimination would be made in favor of those speaking English. Returned students would be welcomed into the homes and would be looked up to, instead of being ridiculed, as at present.

In the Kingman Day School I encouraged my pupils to teach the little children at home in the camps. The children told me they were doing so, and the policeman corroborated their statements. The result was that every new pupil the second year could speak enough English to be understood, and could understand what was said to him. I know it was the work of the other children, because the new ones had such sentences as, "Please, may I leave the room?" "Please, may I have a slate pencil?" etc. Besides the children said that many children too small to come to school had been taught to speak English.

STOCK RAISING AND DAIRYING

GEORGE W. NELLIS, SUPERINTENDENT, PINE RIDGE INDIAN SCHOOL, SOUTH DAKOTA

Farm life, and particularly that part of it which pertains to stock raising, is the ideal life for the Indian. His life has been one of freedom, and he loves animals. His chances of success are much greater in such work than in the professions or trades.

The course of instruction need not be extended, but it should be thoro and practical. Pupils should be taught the distinguishing characteristics of different breeds of cattle, so that they may be able to select intelligently stock suitable to the localities in which they live, and for the purposes for which they are to be used, whether for dairy, for beef, or both. The value of cattle in comparison with Indian ponies should be made clear to them. They should be taught the necessity of providing shelter, of putting up sufficient quantities of hay, the proper method of rearing calves, etc. I see no reason why in the larger reservation schools, where sufficient hay and pasture land is available, this industry cannot be developed to the extent of at least furnishing all the beef needed for the subsistence of the school. I am confident it would prove a good investment from a financial as well as educational point of view.

Sheep raising can be made a profitable business for the Indians, and should be given attention in the schools. Many of the reservations are peculiarly adapted to this industry. It is a desirable occupation for the Indian, because it can be entered upon without a great amount of capital.

Poultry raising should be a part of the industial training of every school. It should be carried on by the girls under the direction of the matron. The girls take to it with delight. The poultry yard is valuable, not only because of its educational worth, but because of the much-needed variety of food it furnishes for the school table.

To get the Indian interested in dairying will go very far toward the solution of the home question. He can raise cattle for beef purposes and still do a great deal of roving about, but he cannot keep cows for dairy purposes without remaining quite closely at home. To be profitable they must be sheltered, and they must be milked and fed regularly.

A herd of good dairy cows, with suitable buildings for their care and protection, and with facilities for the proper care of milk and the making of butter and cheese, should form a part of the equipment of every school. The boys should be taught how to care for and feed dairy cattle so as to obtain the best results, and both boys and girls should be taught to milk, and to do so in a cleanly and sanitary manner. Girls should be carefully instructed as to the care of milk and the making of butter and cheese.

TEACHERS' CONFERENCE

HOW MAY SCHOOLROOM EXERCISES INCULCATE HABITS OF THRIFT AND ECONOMY?

MISS CARRIE A. WALKER, PRINCIPAL TEACHER, WILD RICE RIVER SCHOOL, MINNESOTA

The underlying principles of thrift and economy are: A place for everything, a time for everything, cleanliness, and thoroness.

Example being greater than precept, teachers should see that their own desks and belongings are kept in order. Each child should have pencil, pen, tablet, books, etc., and be held responsible for each article and the general appearance of his or her territory. A friendly spirit of rivalry will tend to make care of personal property a pleasure.

Beginning with the lowest grades, see to it that each task is done to the best of the child's ability. Follow this plan in all grades, and a habit will be formed that will prove a benefit to the child always. Show that a piece of work, no matter how trivial, if well done, is in itself a recommendation for the doer. All excellence depends upon thoroness. Commend all good work. A word of praise or a look of approval costs little, and is worth much to the pupil.

In the sewing lessons economy in cutting should be clearly demonstrated. Small pieces left over are just what are needed by the thrifty little people who are making quilts, rugs, or carpets for the doll's house.

In our nature-study lessons in the fall we note the preparations made everywhere for the winter. We see the farmers gathering their crops, storing what is needed for the family and for seed the next spring, and taking the remainder to market. In talks we bring out the need of saving part of the income thus derived. In our own little garden beds we see the application of our talks, for we gather and save seeds needed for use the coming spring, and thus avoid an expenditure for new seeds. The child learns to save by saving.

In number work take problems from real life with which the child is familiar. Give practical problems in buying, selling, and saving to put in the bank. Require pupils to bring in original problems involving a bank account. Higher grades should learn practical lessons along the same lines.

In all schoolroom exercises the teacher must be the living pattern which the child unconsciously imitates. If she practices true economy the children will tend to form right habits. If she is wasteful, they will be more so.

TRAINING OF THE INDIAN BOY AND GIRL FOR LIFE ON THE RESERVATION AFTER LEAVING SCHOOL

MRS. LAURA H. RATLIFF, OMAHA INDIAN SCHOOL, NEBRASKA

When the pupil goes home he goes from superior to inferior surroundings and conditions; he goes from the preparation for a task to the task itself; he goes to a very real and to a largely degenerating environment. The teacher should consider first the home, the surroundings, influences, conditions, and appliances to which the pupils return, and then consider how to prepare them to approach these conditions to the best advantage. As habits form the greatest bulwark against adverse influences, we should give our earnest attention to cultivating right and strong ones in our Indian pupil. Those which he will need most are habits of industry, forethought, and character, and when he has fully acquired these the pupil will be well fitted to lead a successful life on his allotment.

METHODS OF INSTRUCTION AND MANAGEMENT

MRS. TAMA M. WILSON, TEACHER, CANTONMENT INDIAN SCHOOL, OKLAHOMA

We ought not be content with fair, or even good, results, but ever watchful for the very best. Observation and habits of industry should be cultivated, good books and educational journals should be read and studied, with an endeavor to pick something out of the thoughts and experiences of other educators that we can make our own, to the advantage of the Indian boys and girls intrusted to our care. The employment of some of our leisure time in original thinking and planning would add much to the practical value of our work.

Careful attention should be given to the arrangement of exercises in which the teacher has not full control. In the presence of the children the instructor should not be careless in anything, but methodical and especially accurate and right in all things; setting an example that all would do well to emulate.

THE PRACTICAL ADVANTAGE OF MORE ORAL WORK

MISS LYDIA E. KAUP, PRINCIPAL TEACHER, MT. PLEASANT SCHOOL, MICHIGAN

It is not implied that written work is of no value. It is a necessary part of a pupil's education, but Indian pupils need a far greater amount of oral than of written work.

Oral work is necessary to teach language correctly. Being of a quiet disposition, Indian pupils are quite contented to work for hours at a written discussion of some subject, which, when finished, will have some words poorly arranged, unnecessary words added, and many necessary ones omitted. The fault lies in the fact that they do not understand the English well enough to arrange the words in a correct manner and to give a pleasing expression.

Oral work also creates self-confidence, which the Indian pupils need so much. Every class-room teacher knows how reticent they are. The whispered low-toned monosyllabic answer is a general characteristic. The Indian must come in contact with the white man in order to progress. The better he commands English the more rapid will be his advancement. He will, however, keep aloof to the degree measured by the difference in ability to express himself orally.

A valuable means by which oral expression can be secured from the older pupils is discussion of historical and current events. They are especially interested in the events of the day, and will discuss them more readily because they are occurring at the present time.

MORE PRACTICAL AND LESS MECHANICAL WORK IN THE GRADES

MRS. ELLA H. GILMORE, TEACHER, CHEYENNE AGENCY, S. D.

Spencer says: " Education should develop the power of providing for one's family. It is the basis of good citizenship." If this be true, how important it is that the Indian child should be taught those subjects which will be of most value to him in providing his livelihood and making him a useful citizen! The conditions from which the child comes and to which he must return should be thoughtfully studied. The teacher should know something of the tribe, country, and probable occupation of his future life, to be able to direct his thoughts, work, and study in such a manner as to arouse a desire for a self-supporting, intelligent manhood.

Practical everyday problems should be taught thruout the grades. Girls should learn to measure cloth and estimate the cost of a dress or other article of clothing; to measure milk, vinegar, and oil in gallons, finding cost by the pint and quart, and the reverse. Boys should measure corn, beans, potatoes, and other farm products, and ascertain the cost at the market price. They will be surprised to learn the cost of potatoes used in the school for one year.

Let them measure the wood-pile, not only in cords, but in fractions of the cord in the higher grades, and tell how many there are and find the value of the same. They will be interested and work with a will very different from the spiritless way they plod over problems in their books.

INDUSTRY AND ECONOMY ARE NECESSARY TO THE INDIANS, INDIVIDUALLY AND AS A RACE

MISS ALLIE B. BUSBY, PRINCIPAL TEACHER, INDUSTRIAL BOARDING SCHOOL, CROW CREEK, S. D.

By frequent talks in the class-room on this subject, I have endeavored to impress this thought on the minds of the pupils by referring to Indians, and other persons known to them, who have well-stocked and productive farms and comfortable homes as a result of their own industry, and comparing their condition with those who have made little use of their opportunities.

Industry should be the watchword in every department of the school, but, as there is light and shade in life as in pictures, this may be carried too far. Too constant employment will not only have a disastrous effect physically, but cause the children to dislike their school, and throw such a baneful influence on their future that when they are free from the restraint of the school they will shun that which made it distasteful.

As industry without economy avails but little in the struggle for existence, the Indian boy and girl must learn economy in the school. They cannot learn it from their people. I would teach the pupils that the value of anything depends on the benefit derived from it. Require both pupils and Indian assistants to save a portion of the money they earn, and tho it may be very little, the habit will eventually be formed. Discourage waste in every department. Let everything be used for a good purpose. Encourage the girls to make rugs and cut carpet-rags from old clothing. The result of such work will be of practical value in their homes. The boys should be taught economy in the care of implements used on the farm, in not allowing any of the produce to be wasted, in the care of their clothing and other things they use.

HOW TO MAKE THE INDIAN SEE THE IMPORTANCE OF INDUSTRY AND ECONOMY

MISS CLARA C. MCADAM, MT. PLEASANT, IA.

Nowhere more than in the Indian service are well-rounded, broad-minded teachers needed; those who can make even the washing of windows appear at the time to be the pleasantest thing in the world.

There is strength in the union of industrial and class-room instruction. Interest has been awakened, and I hope a desire to economize, by familiarizing pupils with the approximate cost of school supplies, then having them report money received, and calculate what would remain after paying for their school equipments, or how much more would be required to pay for them.

As it is our duty to teach economy for individual well-being, the advisability of having cooking classes is apparent. Pupils can thus learn frugal management for the family; also to avoid useless expenditure. Pupils should be taught to plan meals and be allowed to carry out their plans, and thus learn by experience that method economizes labor; that punctuality, system, and order economize time. When possible, girls should be taken to the grocery and meat market and taught to buy economically. Above all things we should keep in mind that we are, or should be, training homemakers. The idea should be impressed upon boys and girls that they should avoid going in debt; that present pleasure should be sacrificed to future good; and also the good old proverb, "Who goes a-borrowing goes a-sorrowing."

TEACHING LITTLE CHILDREN HOUSEKEEPING WITH DOLLS, AS SUGGESTED IN THE COURSE OF STUDY

I. MISS JESSIE MATTOON, TEACHER, ONEIDA INDIAN SCHOOL, WISCONSIN

Childhood, like every age, needs its duties, tho these must be simple, within the child's range of experience; something in which his interest can be aroused. No part of an undertaking is ever more important than the beginning; hence when we teach little children housekeeping or homekeeping, tho it is with dolls and done in the play spirit, we are teaching them to work, to make homelike the tiny house by putting paper on the walls, making the rugs and carpets for the floor, the chairs, table, bed, etc.

The doll's clothes give opportunity for instructive as well as interesting lessons in sewing. The way things are made is of intense interest to children. Teach them to cut out clothes by accurate patterns of dolls' clothes; to lay the pattern the right way of the cloth, and how to twist and turn the different parts to cut the garment in the most economical manner from the least material.

Careful attention should be given to the kitchen. Endeavor to teach neatness, which is order. Also teach the little housekeeper to wash her doll's clothes properly.

In our little household the social side of life should receive its full share of attention. Little parties may be given. Thanksgiving and Christmas dinners are events from which the children derive much pleasure.

II. MRS. MOLLIE J. ROBBINS, TEACHER, PINE RIDGE AGENCY, S. D.

Children must learn by doing, and the best device I know of with which to teach housekeeping is the dollhouse.

The house and furnishings might be made on the scale of one inch to a foot, and this will give the children many lessons in measuring. Have written on the board a list of articles needed for the house; then let them be made from paper by folding and cutting; and finally have them made substantially from wood, tin, or other suitable material. I would next have one pupil collect everything and arrange a sort of house-furnishing store, with values placed on everything. Then I would tell the children a story something like this: "Mr. and Mrs. Redpaint have been living in a small, poor house with large cracks in it, and they want a better one. Mr. Redpaint has been working and has saved his money. Mrs. Redpaint has sold eggs and butter and saved her money also, and now they have enough to buy the lumber, window glass, and other material for a new house, with four rooms. Children, let us play that this is their new house. Wallace, you may go to the house-furnishing store and buy a good bed; Minnie, go and buy a mattress; and Jacob, you may buy a cook-stove"—and so on until all the necessary articles are placed in their proper places. This may be varied and extended as the judgment of the teacher may suggest. I appoint each week two of the younger girls to keep the house in order, systematically doing the round of work each day. In this way the children become familiar with every article in the house and learn a great deal about homemaking. The work for each day is well planned in our new course of study.

HOW MAY THE SOCIAL, MORAL, AND RELIGIOUS TRAINING IN OUR INDIAN SCHOOLS BE MADE EQUAL TO THAT OF A GOOD HOME?

SISTER CATHARINE BUCKLEY, SUPERINTENDENT, ST. MARY'S INDIAN SCHOOL, WIS.

The Indian child comes to us with little or no home training, and happy are we if he be in his tender years. There will be much forming to do, but it is easier than reforming.

Let us meet the difficulties to be overcome with the two prime factors of a good home training: a mother's love and a mother's watchful eye. To be found wanting in this regard, whatever other qualifications an employe may possess, is to lack an essential; and no child discovers the sincerity or falsity of an affection more quickly than do our Indian youth. This genuine affection consists chiefly in the desire to do good, lasting good, to our pupils; all other affections are worse than useless. Such employes every school should have, and where they are found wanting, good training is lacking in proportion.

Employes should act as good parents who must habitually economize in order to meet all the demands upon their purse, and each one should take a personal interest in all that pertains to the school, as he would were he the actual possessor of the property.

MATRONS' CONFERENCE

HOW CAN WE LEAD PUPILS TO REALIZE THE VALUE OF THE ARTICLES ISSUED FROM THE WAREROOM?

MISS BERTHA A. MACEY, MATRON, ONEDIA INDIAN SCHOOL, WISCONSIN

It has been my experience that clothing brought from the homes, no matter how poor, is carefully cherished by the child, because it represents to him the labor of the parent, and he knows that it cannot easily be replaced; whereas articles from the government wareroom, altho of greater value, are freely destroyed, simply because there is plenty more to be issued from the same place, and because they do not represent to the child any value in labor or sacrifice.

Just what plan would be best to adopt in bringing about the needed reform I am not at present prepared to state. It might be wise to place the older children on the pay-roll, paying them for the work performed for the school, and then require them to buy their clothing and such material as they would use in manufacturing it.

In addition to the monthly stipend, there would be many little ways in which pupils could add to their income by rendering service to employes, such as the care of their rooms, laundry work, or sewing.

Let us give the boys and girls a chance to use more independence in providing for themselves, but let them have the watchful care of an older head as to the best use to make of their money until such time as they will have more mature judgment.

The best way to help our young people is to give them a chance to help themselves.

COOKING FOR THE INDIAN GIRL

I. MRS. EMMA E. DUCLOS, TEACHER, PHŒNIX INDIAN SCHOOL, PHŒNIX, ARIZ.

At Phœnix we try to give the cooking class-room the atmosphere of a well-regulated home. The planning, cooking, and serving of two regular meals each day (dinner and supper) by a detail of five of the girls, six scholars from outside being invited to each meal, contributes materially to the homelike character of the work. The menu includes as large a variety of dishes as possible during the year. The need that has appealed to me most forcibly is that of adapting the course of study to the future needs and present capacity of the pupil. To attempt too much is to fail in all. The time of training is short. Let first things come first. Good bread is a necessity, and every girl should learn to make it; then lessons should be given in mixing and baking of biscuits, gems, rolls, etc., some of which, however, with the cooking of meats, potatoes, and other vegetables, are included in the daily preparation of dinner and supper. All work is actually performed by the girls themselves. I should like to emphasize the need of teaching economy. The likelihood of a necessity for close economy in the future, when the struggle for civilized existence may be bitter indeed, should impress the teacher with a feeling of responsibility in this matter. In our class work we use plain recipes, often substituting lard for butter, and cautioning pupils to use the exact amount called for in the recipe, and no more. In preparing the daily supper the food left over from dinner is utilized for hash, croquettes, etc., so there may be as little waste as possible.

II. MRS. S. M. McCOWAN, MATRON, CHILOCCO INDIAN SCHOOL, OKLAHOMA

The extent of an Indian girl's knowledge of cooking is confined generally to the stewing and roasting of meats, boiling of beans and potatoes, the boiling and parching of corn and wheat, and the manufacture of a very simple and poor quality of breadstuffs.

Let us have cooks capable of preparing meats and potatoes in half a dozen simple and appetizing ways; of making good, wholesome bread and biscuits, mushes, etc. Every girl of twelve years and upward should spend some time each week in a modern cooking class. In these classes pupils should learn cooking, setting the table, the making and care of the table linen, and other dainty things that go to make home cheerful and attractive. From eight to twelve students should be placed in each class.

Details for these classes should be taken from each department, so as to not interfere more than is necessary with the regular work of that department. Each class should have a whole day for a lesson. Especially is this true when they have completed the elementary work and undertake the actual preparation of meals, cooking meats and bread. It is not wise to have one class set the yeast, another knead the dough, and still another bake the loaves. Every girl in every class should do all this work, and do it often. All the work of preparing meals should be practiced so often and thoroly that the work becomes natural and easy. Much care should also be given to washing the dishes, scouring knives and silverware, scrubbing floors and sweeping, setting tables, and to the disposition of table linen. At least one lesson per week should be given until a complete practical course is finished, and each lesson should occupy a whole day.

III. MRS. EMILY L. JOHNSON, HOUSEKEEPER, HASKELL INSTITUTE, KANSAS

Why teach cookery? To possess a sound body, an active mind, a noble spirit, which are an "indivisible trinity"—this is the first reason why we teach cookery.

How to teach cookery? If you cannot do as you would, do as you can. One of the happiest faculties of woman is the ability to adjust herself to her surroundings, so we find cookery taught in a variety of ways, according to conditions and materials available. The lesson is brought before the pupil either by an outline placed upon the board or by reference to a lesson-paper, and by prepared dishes illustrating the subject. This method is now in use at Haskell, and pupils are detailed for two months, thereby getting forty consecutive lessons.

In addition to the class work, the dairy work, laundry, and mending, and (so-called for want of a better name) a responsibility department are carried on, two girls taking up each line of work for a week. To learn responsibility the girls plan and prepare meals for sixteen pupils, who come from the general dining room to the small dining room where the meal is served. This is a very helpful lesson in self-reliance.

Many a girl has come into the class with a positive dislike for housework, and has gone out with a liking and respect for its duties that have ennobled both the duty and the doer. She has felt it a privilege to go into families to do housework to put into practice what she has learned and to observe and compare methods from a student's point of view.

IN WHAT WAY MAY RETURNED STUDENTS RENDER THEIR SERVICES VALUABLE TO THEMSELVES AND TO THEIR PEOPLE?

MISS M. E. BLANCHARD, MATRON, CROW CREEK SCHOOL, SOUTH DAKOTA

The returned student's earliest service may be the encouragement and example of industry. He is the admiration of the pupils in the home school, because of his superior attainments. He has the ability to be of service to the boys. The real interest he can take in their work will increase its importance to them. They will view details in a new light if the student has done similar work in the big far-away school, where the ball teams win victories over the white universities, and where as well there are shops for the manufacture of finely-finished articles and more industries than they can understand. There is encouragement in the thought that *he* can wear overalls and heavy boots, and do some of the best ditching, plowing, and cultivating ever seen, and hundreds of other things that must be done in working the land. Where several students are returning to the same reservation, each might make a special study of some industry, and do his best to cultivate it. They might have an occasional meeting, to which others could be invited, and where an exchange of ideas could give all the benefit of the experience of each. Poultry is such an industry, as is also the raising of sheep, cattle, the management of a dairy, and the raising of hogs. All of these provide for the farmer's table, and also afford much for the market. The useful trades can also be fostered in this way.

THE PHYSICAL, MORAL, AND SPIRITUAL DEVELOPMENT OF INDIAN CHILDREN

MRS. NANNIE E. SHEDDAN, MATRON, RIVERSIDE SCHOOL, OKLAHOMA.

We, as instructors of the Indian children, are responsible for their physical, moral, and spiritual development, and our instruction must be first by example, then by precept.

Exercise and cleanliness will not only keep the child in good health, but will often repair inherited and acquired defects. Habits of dress, diet, sleep, sports, etc., are all of so much importance to the physical development of our pupils that special care should be given to them. Train the children in good habits; habits of self-respect, self-help, industry, integrity, and decision, perseverance, and self-reliance. Teach them the dignity of labor, and that success comes to those who are thoroly in earnest. Show them your personal interest, which often inspires with the courage necessary for success.

The most hopeful work is with the little children. The moral development of the child begins as soon as the mental, and the two march hand in hand.

HOW TO TEACH CHILDREN TO GO AHEAD WITHOUT BEING TOLD

DELLA MERIWETHER, MATRON, RED MOON INDIAN SCHOOL, OKLAHOMA.

The matron must be industrious, firm, and kind, and she must be a mother to the pupils, if she expects them to love and obey her. Do not tell children what to do, and do not talk too much. Endeavor to let them discover what is needed to be done, and tell you. Impress upon your pupils the importance of industry and cleanliness in housekeeping.

PRODUCTIVE INDUSTRIES FOR INDIANS—LACE MAKING

MISS PAULINE COLBY, LEECH LAKE AGENCY, MINNESOTA.

Among the various productive industries which civilization has brought to the Indian, that of lace making has been among the most successful. This is proved by the fact that the lace has always found a ready market, and that the demand is steadily increasing. Its value as a moral factor among the Indians should not be overlooked, as it enables the woman to be the principal breadwinner of the family, in which position she commands more respect and consideration than under the old order of things. It checks also the tendency to roam, and emphasizes the necessity for personal cleanliness. A woman can sit in her own home and keep a general supervision of her family while doing this work, which is an undoubted advantage over the work which takes her abroad continually, forcing her to neglect her home and drag her little ones about with her in all sorts of weather.

The articles made include caps, collars, boleros, centerpieces, edgings, table covers, handkerchiefs, etc., and they compare favorably with work of the same kind done elsewhere, thus proving conclusively that skill and patience are native qualities in the Indian character.

Necrology

Reports of the death of the following named life and active members have been received during the past year:

W. H. BAKER[1]	Savannah, Ga.
NATHANIEL L. BENHAM	Niagara Falls, N. Y.
HENRY BENNER	Albion, Mich.
GEORGE STOCKTON BURROUGHS	Oberlin, O.
WILLARD HARRIS CHANDLER	Sun Prairie, Wis.
WATSON CORNELL	Philadelphia, Pa.
ROBERT CURRY	Allegheny, Pa.
JEHIEL KITTERIDGE DAVIS	Chicago, Ill.
WILLIAM H. GLASCOCK	Bloomington, Ind.
FRANK VALENTINE HUBBARD	Red Wing, Minn.
JOHN SCULL IRWIN	Lafayette, Ind.
HENRY MARTIN JAMES	Portland, Ore.
LAURA LUCAS MONSARRAT	Louisville, Ky.
JOHN G. NAGELER	Milwaukee, Wis.
JOHN DANIEL ORR	Kansas City, Kan.
FRANCIS WAYLAND PARKER	Chicago, Ill.
CALVIN SMITH PENNELL	St. Anthony Park, Minn.
CHARLES COLLINS ROUNDS	New York, N. Y.
KATE TAUBMAN	Deadwood, S. D.
HENRY J. TAYLOR	Sioux City, Ia.
EDWARD GENDER WARD	Brooklyn, N. Y.
WILLIAM CLARKE WHITFORD	Milton, Wis.
JOHN D. YERBY	Mobile, Ala.

The brief sketches that follow have been prepared from data obtained, so far as possible, from relatives of the deceased.

IRWIN SHEPARD, *Secretary.*

Nathaniel L. Benham

Nathaniel L. Benham, superintendent of schools at Niagara Falls, N. Y., was born in Seneca Falls, N. Y., October 29, 1851. He received his education in the public schools of Seneca Falls, and later in Seneca Falls Academy.

At the age of seventeen he began teaching school, and continued in the work for eight years.

In 1875 he was admitted to the bar and began the practice of law, removing to Buffalo in 1880. In 1884 he was appointed principal of the Niagara Falls Union School, and remained in that position until 1891, when he was chosen superintendent of schools at Niagara Falls, which position he held at the time of his death, which occurred August 3, 1901. His wife and three children survive him.

He became a member of the National Educational Association at the Denver meeting in 1895.

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[1] It has been impossible to secure data for a sketch of W. H. Baker, who became a life member at the St. Paul meeting in 1890.

Henry Benner

Henry Benner, Ph.D., was born in Milford Township, Bucks Co., Pa. The early part of his life was spent on the farm, working during the summer and attending school during the winter months.

At the age of fifteen he began teaching in a district school. After teaching for several years he attended and completed a course of study in the State Normal School at West Chester, Pa., and on graduation was elected instructor in mathematics and English in his Alma Mater. This position he resigned to pursue higher studies in mathematics in the State University of Michigan, from which he received the degree of M.Sc.

He was University Fellow in Mathematics at Clark University, Worcester, Mass., in 1889–90; in charge of the Department of Mathematics, Northwestern University, Evanston, Ill., 1890–92; instructor in mathematics, Chicago Training School, 1892–95. He then resigned to go abroad for study and travel. While abroad he studied at the University of Berlin and at the University of Erlangen, where in June, 1897, he passed examinations *magna cum laude*, and received the degree of Ph.D.

In June of the same year he was elected to the chair of mathematics in Albion College, Mich., which position he held at the time of his death, August 12, 1901.

Professor Benner never married. A brother and sister are the only surviving relatives.

Professor Benner was a member of various scientific societies in Europe and America, and became an active member of the National Educational Association in 1901.

George Stockton Burroughs

Dr. George Stockton Burroughs, professor of the Old Testament language and literature in Oberlin Theological Seminary, died at Clifton Springs, N. Y., October 22. He leaves a wife and three children, who will contiuue to make their home in Oberlin. Born in 1855, Professor Burroughs received from Princeton the following degrees: A.B. in 1873; A.M. in 1876; B.D. in 1877; Ph.D. in 1884; D.D. in 1886. His degree of LL.D came to him from Marietta College in 1893. He held pastorates in Slatington, Pa., 1877–79; Fairfield, Conn., 1879–83; and New Britain, Conn., 1883–86. From 1886 to 1892 he was college preacher and professor of biblical literature at Amherst College; and from 1892 to 1899 he was president of Wabash College. His work in Oberlin Theological Seminary thus covered but two years. He became an active member of the National Educational Association at the Denver meeting in 1895.

Willard Harris Chandler

Willard H. Chandler was born in Brattleboro, Vt., in 1830, and obtained his early education at his home school. In 1854 he removed to Wisconsin, and settled first at Delavan; later he removed to Windsor, near Madison; and in 1868 he located on a farm at Sun Prairie village, where he resided until his death, in 1901.

Altho his school training practically closed at fifteen years of age he was a lifelong student, and an earnest, independent thinker, and had a large part in building up a great and connected public-school system in his adopted state.

In 1856 he taught a rural school near Windsor, Wis.; later he was town superintendent, and for four years was a county superintendent. In 1861 he became a member of the state legislature, and for the following years of his membership of that body a leader in all matters of educational legislation. In 1871, at the opening of the first Wisconsin state normal school at Platteville, he became a member of the board of regents of normal schools, a position which he held continuously for twenty-one years. From 1881 to 1890 he held the position of assistant state superintendent of public instruction, and was largely instrumental in organizing and conducting the state teachers' institutes. He was for four years state inspector of high schools.

He became a member of the Wisconsin Academy of Sciences in 1872, and a life member of the National Educational Association at the Madison meeting in 1884.

Watson Cornell

Dr. Watson Cornell was born near Richboro, Bucks Co., Pa., in 1845. He graduated from the Millersville State Normal School in 1868, and received the degree of Ph.D. from the University of Pennsylvania in 1897.

After teaching for a time in rural schools of Clearfield county he removed to Philadelphia in 1870 to become the principal of Point Breeze School. In 1879 he organized the grammar school at Twelfth and Jackson streets. In 1885 he was made supervising principal. In 1889 he became supervising principal of the Logan Grammar School, which position he held at the time of his death, which occurred at his home in Philadelphia, March 16, 1902. His wife and three children survive him.

He became an active member of the National Educational Association at the Buffalo meeting in 1896.

Robert Curry

Dr. Robert Curry, the founder of Curry College, Pittsburg, Pa., was born in Westmoreland Co., Pa. He graduated from Jefferson College in 1848, receiving from the college the degree of A.B. in that year, of A.M. in 1851, and of Ph.D. in 1873.

In 1860 he founded Curry College; in 1873 he was appointed deputy state superintendent of public instruction; in 1876 he was elected principal of the Nebraska State Normal School, and was president of the Nebraska State Teachers' Association in 1880.

He was the author of various pamphlets, addresses, and reports on educational topics.

In 1895 he had a stroke of apoplexy, from which he did not fully recover. He died at Allegheny, Pa., December 13, 1901.

He became a life member of the National Educational Association at the Madison meeting in 1884.

Jebiel Kitteridge Davis

Principal J. K. Davis died at his residence in Chicago, February 5, 1902. He was born in 1848, at Troy, Oakland Co., Mich.

He spent his early life on a farm, excepting for short periods when attending the city schools at Pontiac. In 1865 he graduated from Eastman's Business College, Poughkeepsie, N. Y., and in 1874 from the State Normal College at Ypsilanti, Mich. He began teaching immediately after graduation, at Concord, Mich. Later he taught for a number of years in various states. He spent two years in the southern states among the schools for colored people, sustained by the American Baptist Home Missionary Society, and for a time was principal of the Baptist Bible and Normal Institute, at Memphis, Tenn. After a few years of business life in Michigan and Arizona, he accepted the principalship of the Audubon School in Chicago, in which position he had served for three years at the time of his death.

His wife, a son, and a daughter survive him.

He became an active member of the National Educational Association in 1900.

William H. Glascock

William H. Glascock was born near Greenfield, Ind., in 1857. His boyhood was spent on a farm in Hancock and Tipton counties, and his early education was received in the rural schools. At the age of twenty years he began teaching a country school, and graduated from the Central Normal College at Danville, Ind., in 1885. He graduated from the Indiana State University in 1898, and took his master's degree at the University of Chicago in 1899.

He was county superintendent of the schools in Hancock county for four years, and later became superintendent of schools of Greenfield, Ind. He later became superintendent of the Indiana State School for the Blind, and was elected to the superintendency of the schools of Bloomington, Ind., in 1899, which place he held at the time of his death. He also held a position as associate professor of pedagogy in the Indiana State University.

Mr. Glascock had written two books for children, and was expecting soon to complete a more extensive work.

His death occurred December 26, 1901.

He became an active member of the National Educational Association in 1899.

Frank Valentine Hubbard

Frank Valentine Hubbard was killed by an accident at his home in Red Wing, Minn., on August 27, 1901. He was born in southern Wisconsin February 14, 1855. His boyhood was spent on the farm, where, in the rural schools for a few months each year, he secured his early education.

He taught in the country schools at an early age, and later completed a course at the State Normal School at Whitewater, Wis. He served as principal of schools at Dundas, Minn., and as superintendent at Redwood Falls, Waseca, and Red Wing. He took a prominent part in the various country, district, state, and national educational gatherings, and was recognized thruout the state as one of the leading and progressive educators.

He became an active member of the National Educational Association in 1895, and served as state director in 1899.

John Scull Irwin

John Scull Irwin, LL.D., was born of Scotch-Irish parentage at Pittsburg, Pa., April 4, 1825. He graduated from the Western University of Pennsylvania with the degree of A.B., in 1842, and from the University of Pennsylvania with the degree of M.D. in 1847. In 1875 he was granted the degree of LL.D. by the State University of Indiana.

Because of ill-health he abandoned the practice of medicine and removed in 1853 to Ft. Wayne, Ind., where he engaged in the banking and insurance business for twenty years.

In 1875, having served ten years as school trustee, he was elected superintendent of the Ft. Wayne schools, which position he held until 1896. Retiring from active life at that time, he removed a year later to Lafayette, Ind.

His death occurred in that city August 19, 1901.

He became a life member of the National Educational Association at the Chautauqua meeting in 1880.

Henry Martin James

Henry M. James was born in the town of Troy, Geauga Co., O., March 3, 1837. His early life was spent on a farm and in attendance on a rural school during the winter months.

In 1850 he entered the Eclectic Institute at Hiram, four miles from his home. He and his sister, with Burke A. Hinsdale and his sister, united in boarding themselves while attending school at Hiram. He taught his first school near Hiram. For several years following he was alternately teacher and student. Under the advice and encouragement of James A. Garfield he studied at Oberlin College, and afterwards at Williams College, where he graduated in 1861 with the degree of A.B. The degree of A.M. was granted to him by his Alma Mater in 1864.

After graduation he taught school at Hudson, Mich. In 1864 he was called to the Kentucky Street School in Cleveland, O. Mr. James was associated with Andrew J. Rickoff in the Cleveland schools for the following sixteen years. In 1882 he became superintendent of the city schools of Omaha, Neb., which position he held for nine years.

After a year of travel visiting schools in Europe he became superintendent of city schools of Tacoma, Wash., in 1893, where he remained three years. Later he served as principal of the high school at Portland, Ore., for a short time, but resigned on account of ill-health.

His last months were spent with a married daughter at Chapel Hill, S. C. He died August 5, 1901. His wife and two daughters survive him.

He became a life member of the National Educational Association at the Madison meeting in 1884.

Laura Lucas Monsarrat

Mrs. Laura L. Monsarrat, whose maiden name was Laura Lucas, died April 12, 1900. She was a native of Louisville. Her early education was obtained in public and private schools of that city.

In 1850 she was appointed teacher in the Female School at Fourteenth and Jefferson streets. In 1852 Miss Lucas became principal of the Female Grammar School, which position she held until 1856, when she was elected assistant in the Female High School. In 1861 Miss Lucas was married to Mr. Monsarrat, a teacher in the high school. A year later she became assistant in one of the male high schools, and in 1862 was again elected assistant in the Female High School. In 1881 she became principal of a district school, and in 1882 was transferred to the Seventh Ward School, where she remained until the time of her death.

An evidence of the esteem in which the children of Louisville held Mrs. Monsarrat appears in the fact that the monument erected over her grave was paid for by money donated by the children.

Mrs. Monsarrat became a life member of the National Educational Association at the Louisville meeting in 1877.

John G. Nageler

John G. Nageler was born in Oldenburg, Germany, March 27, 1858. At the age of fifteen he removed with his parents to New Holstein, Wis. Later he attended the Chilton High School, and afterward taught in the rural schools of the town of New Holstein. He completed a four years' course of study in the Oshkosh State Normal School, graduating with the class of 1885. For four years following he was instructor in English in the German-English Academy of San Antonio, Tex. He then returned to Wisconsin and became principal in the Janesville High School for two years, and later of the Chilton High School until 1896, when he was appointed principal of the Nineteenth District School of Milwaukee, Wis., which position he held until the time of his death, September 25, 1901.

He became an active member of the National Educational Association in 1896, at the Buffalo meeting.

John Daniel Orr

Principal J. D. Orr, of the Central School, Kansas City, Kan., died at that city November 2, 1901. He was born near Ft. Scott, Kan., in 1865. He was educated in the common schools of Bourbon Co., Kan., and in the Kansas Normal College at Ft. Scott, from which he graduated in 1895. He held the principalship of schools in Ft. Scott for eight years. He next took charge of the schools at Big Timber, Mont., where he remained two years. Returning, he again became a principal of the Central School, Ft. Scott. This position he resigned to take charge of the Central School of Kansas City, Kan.

His wife and two children survive him.

He became an active member of the National Educational Association at the Toronto meeting in 1891.

Francis Wayland Parker

For an extended memorial sketch of Colonel Parker by Wilbur S. Jackman, dean of the School of Education, University of Chicago, and tributes by members of the National Council, see pp. 399–408 of this volume.

Calvin Smith Pennell

Professor Calvin Smith Pennell, whose death occurred at St. Paul, Minn., on March 16, 1901, was well known in St. Louis for many years as a teacher in the high school and in Washington University. He was born in Colrain, Mass., January 24, 1816, but in early boyhood went to Franklin, Mass., where he came under the influence of his uncle, Horace Mann, fitting for Waterville College, Me., from which institution he graduated in 1841. He then became the principal in succession of the academies at Wrentham, Chicopee, Charlestown, and Lawrence, Mass. In 1853 Professor Pennell joined his uncle at Yellow Springs, O., where Mr. Mann was then president of Antioch College, and contributed much to the brilliant reputation which that institution enjoyed.

In 1856 Professor Pennell went to St. Louis, Mo., where he took charge, first, of the high school, and later of Mary Institute, the girls' department of Washington University, in which position he remained for thirty-one years.

In 1887 Professor Pennell left St. Louis to make his home in Minnesota, where his life has been passed quietly in the enjoyment of his literary pursuits and in the pleasures of a country life. He leaves one daughter, Mrs. C. C. Hoyt, of Greenfield, Mass.

He became a life member of the Association in 1864 at the meeting in Ogdensburg N. Y.

Charles Collins Rounds

For an extended memorial sketch of Dr. Rounds by Henry Sabin, of Des Moines, Ia., and tributes by members of the National Council, see pp. 391–399 and 405–408 of this volume.

Kate Taubman

Miss Kate Taubman was born in Cedar Falls, Ia., in 1863. She received her professional training as a teacher in the State Normal School at Cedar Falls. She was county superintendent of schools of Aurora county, South Dakota, for four years; principal of the schools of Plankinton, S. D., for several years; principal of the schools of Aberdeen, S. D., for four years; and was assistant principal of the Deadwood High School at the time of her death, January 27, 1902. She was president of the State Teachers' Association of South Dakota for several consecutive years.

She became an active member of the National Educational Association at the meeting at Asbury Park in 1894.

Henry J. Taylor

Henry J. Taylor was born at Blue Mounds, Wis., April 8, 1855. He received his common-school education at Black Earth, Wis., where he lived the life of a farmer's boy. At the age of seventeen he entered the University of Wisconsin, and graduated with first honors in 1878, receiving the degree of A.B.

The following year he was an instructor in oratory in his Alma Mater, and later became an instructor in Latin and Greek. In 1879 he entered the law department of the university, and the following year was graduated with the degree of LL.B.

From 1882 to 1885 he was county superintendent of schools of the western district of Dane county. In 1884 he completed a special course of study in Greek and received from his Alma Mater the degree of A.M.

In 1885 he entered upon the practice of law in Sioux City, Ia., where he lived until the time of his death, which occurred July 21, 1902, in Auckland, N. Z., where he had gone with Mrs. Taylor in a fruitless search for health. His wife and four children survive him.

Mr. Taylor became a life member of the National Educational Association at the Madison meeting in 1884.

Edward Gender Ward

Edward G. Ward, borough superintendent of schools of Brooklyn, N. Y., died in Brooklyn, September 13, 1901. He was born in Williamsburg, N. Y., in 1846. His early education was obtained in the public schools of New York city and Hoboken Later he attended the New York Normal School and the New Jersey State Normal School at Trenton.

He began his career as a teacher at the age of seventeen as vice-principal of a grammar school in Hoboken, N. J. Later he became principal of a grammar school in Bergen, N. J., and afterward principal of Grammar School No. 2 in Jersey City. A few years later he was made instructor in mathematics and grammar in the Jersey City Normal School, where he remained until 1879, when he was appointed principal of Grammar School No. 19 in Brooklyn. He was the first of a line of educators who have become prominent in the school system of that city.

Superintendent Ward was a writer of high reputation on educational subjects. In 1898, on the consolidation of the boroughs into the city of New York, Mr. Ward was elected borough superintendent, which position he held at the time of his death.

He became an active member of the National Educational Association in 1899.

William Clarke Whitford

President William Clarke Whitford, D.D., was born in 1828 in Edmeston, N. Y. His early education was obtained in the Brookfield Academy at Brookfield, N. Y., and in the De Ruyter Institute. His later education was obtained in Union College and Union Theological Seminary.

He was president of Milton College from 1867 until his death, on May 20, 1902. He was state superintendent of public instruction of Wisconsin for four years, and for nine years was a member of the board of regents of normal schools. For four years he was editor of the Wisconsin *Journal of Education*.

President Whitford became a life member of the National Educational Association at the Madison meeting in 1884.

John D. Yerby

John D. Yerby, late superintendent of public schools of Mobile, Ala., was born in Greensboro, Ala., in 1860. He received his primary education in a school taught by his father, and completed his course at the Southern University at Greensboro, Ala., receiving the degree of A.B. at eighteen years of age; later his Alma Mater conferred on him the degree of A.M.

At nineteen years of age he became teacher in the Boys' Senior Grammar School of Barton Academy; later he became principal of the school, which position he held until he was elected superintendent of the public schools of Mobile in 1895. His death occurred August 10, 1900. His wife and one daughter survive him.

Superintendent Yerby became an active member of the National Educational Association at the Denver meeting in 1895, and was treasurer of the Southern Educational Association at the time of his death.

LIST OF LIFE, ACTIVE, AND CORRESPONDING MEMBERS

ARRANGED BY STATES, CLASSES, AND YEARS OF CONTINUOUS MEMBERSHIP

REVISED TO NOVEMBER 15, 1902

The marginal figures indicate the year of enrollment as active members by those whose names immediately follow. The indented figures indicate year of appointment to present educational position. The value of this list as an educational directory depends upon its accuracy and completeness; all members are invited to contribute to this end by furnishing corrections of errors, however slight, and by supplying omitted data.

The institutions enrolled as members will be found grouped at the end of the list for each state; the arrangement is alphabetical in the order of enrollment.

Extra copies of this list may be obtained by remitting twenty-five cents to the Secretary of the National Educational Association, Winona, Minn.

CORRESPONDING MEMBERS

ENGLAND

1898 **Miss Dorothea Beale**, LL.D., '02, Univ. of Edinburgh, Associate of Queen's Coll., London.
First Lady Mathematical Tutor, 1850–57; also Latin Tutor; Principal of the Cheltenham Ladies' College since 1858; Officier d'Académie of Paris, 1889; President of the Association of Head Mistresses, 1895; Tutor in Letters of the University of Durham, 1896; Author of various Reports, Essays, and Text-Books. *Address:* Ladies' College, Cheltenham.

Sir Joshua Fitch, A.M., '52; Fellow, '75, of the Univ. of London; LL.D., St. Andrews' Univ.
Formerly Principal of the Training College of the British and Foreign School Society; Her Majesty's Inspector of Schools and Chief Inspector of Training Colleges, 1863; Knighted for Public Services on his Retirement from Office, 1896; some time Examiner in Cambridge and London Universities and for the Civil Service: Author of Lectures on Teaching delivered before the University of Cambridge, 1880, and other Books and Essays. *Address:* 13 Leinster Sq., Bayswater, W., London.

Michael Ernest Sadler, A.M., Trinity Coll. and Christ Church. Oxford; LL.D., (honorary) '02, Columbia Univ.
Secretary of the Oxford University Extension Delegacy, 1885–95; Student and Steward of Christ Church, Oxford, 1890–95; Member of the Royal Commission on Secondary Education, 1893–95; Director of Special Inquiries and Reports to the Board of Education (England and Wales) since 1895. *Address:* Board of Education Library, Canon Row, Whitehall, London, S. W.

Hon. E. Lyulph Stanley, A.B., '62, A.M., '63, Oxon.
Member of the Royal Commission on Education, 1886–87; Member of the London School Board since 1876, and present Vice-Chairman of that body. *Address:* 18 Mansfield St., London, W.

1901 **Cloudesley S. Henry Brereton**, A.B., '96, A.M., '90, St. John's Coll.. Cambridge; B. ès L., L. ès L., Univ. of Paris.
Examiner in Modern Languages to the Joint Scholarship Board, 1899–1901; Examiner in French to the Cambridge University Local Syndicate, 1898–1901; Examiner in Modern Languages to the Oxford and Cambridge Joint Board, 1890–1901; Vice-President of the International Jury for Primary Education at the Paris Exposition, 1900; Appointed to inquire into the Teaching of Modern Languages in Ireland. 1901; Writer on Education in "Fortnightly Review," "The Times," "Saturday Review," etc.; Author of various Reports; Addressed the National Educational Association of the United States at Detroit, Mich., 1901, on "The Educational Crisis in England." *Address:* Briningham House. Melton Constable.

Fabian Ware.
Inspector of Secondary Schools for the Board of Education of London; Assistant Director of Education for the Transvaal. *Address:* 54 Goldhurst Terrace, Hampstead, N. W., London: *colonial address:* Pretoria, S. A.

SCOTLAND

1898 **Simon Somerville Laurie**, A.M., LL.D., Univ. of Edinburgh, F.R.S.E.; Hon. Fellow of the Educational Institute of Scotland, and of the Comenius Society, Germany.

Professor of the Institutes and History of Education, Edinburgh University, since 1876; Visitor and Examiner to Dick Bequest (educational) Trust since 1856; Secretary to the Endowed Schools (Scotland) Commission, 1872; Secretary to Association for Promoting Secondary Education in Scotland, founded 1876; at one time President of Teachers' Guild of Great Britain and Ireland; Member of Edinburgh University Court; Author of various Philosophical and Educational Books and Articles. *Address:* 22 George Sq., Edinburgh.

FRANCE

1898 **Ferdinand Buisson**

Professor of Education at the Sorbonne. *Address:* Paris.

J. J. Gabriel Compayré, Ph.D., 1873.

Professor of Philosophy, Lycées de Pau, 1865—de Poitiers, 1868—de Toulouse, 1871; Professor of Philosophy, Faculty of Letters of Toulouse, 1874; Professor of History of Education, Normal School of Fontenay aux Roses, 1880—Normal School of St. Cloud, 1881; Member of Chambre des Députés, 1881–89; Rector of the Academy of Poitiers, 1890–95; Rector of the Academy and University of Lyons, 1895; Corresponding Member of the Institut de France, 1901; Rector at the University of Lyons. *Address:* Lyons, France.

Pierre Émile Levasseur, Doctor (ad Honoris), Univ. of Columbia and Univ. of Budapest; Litt. D., '56.

Professor of Letters and Rhetoric, and of History, at several Lyceums, 1868; Professor at the College of France since 1868; Professor at the Institute of Arts and Trades, 1871–96; President of the Association for the Secondary Instruction of Young Girls at the Sorbonne since 1881; President of the Statistical Commission of Primary Instructors since 1876; Corresponding Member of the Academies of Prussia, Sweden, Hungary, and of the American Academy of Political and Social Science. *Address:* 26, rue Monsieur-le-Prince, Paris.

1901 **Charles Bayet.**

Professor of History and Archæology of the Middle Ages at the University of Lyons, 1876; Rector of Academy of Lille, 1891; Director of Primary Education to the Minister of Public Instruction, 1896; Member of the Higher Council of Public Instruction, 1900; Author of various works on Archæology and History of the Middle Ages; of a volume on Byzantine Art; of various articles on Teaching. *Address:* 27, rue Gay-Lussac, Paris.

Léon Bourgeois.

Formerly Minister of Public Instruction; Member of the Chamber of Deputies. *Address:* rue Palatine, Paris.

Elie Rabier.

Fellow in Philosophy, 1866–69; Professor of Philosophy in the Lyceum of Montauban, 1869–72; of Cours, 1872; of Charlemagne at Paris, 1873–81; Master of the Department of Philosophy at the Superior Normal School, 1881; Director of Secondary Education in the Ministry of Public Instruction, 1889; Author of various Educational Treatises. *Address:* 24, rue de Fleurus, Paris.

Camille Sée.

Counselor of State; Author of the Law of December 21, 1880, which created the Secondary Instruction of Young Women; Author of the Law of June 29, 1881, which created the Normal School; Member of the Committees and Jury at the Universal Expositions of 1878, 1889, and 1900. *Address:* 65, avenue des Champs-Élysées, Paris.

GERMANY

1898 **Friedrich Paulsen**, Ph.D., '71, Berlin.

Professor of Philosophy and Pedagogics, University of Berlin, since 1877. *Address:* Steglitz Fichtestrasse 31, Berlin.

ITALY

1898 **Luigi Bodio**, LL.D.

Counselor of State; Commissioner General of Emigration; President of the Superior Council of Statistics; Member of various Statistical Societies in France, England, Germany, and America. *Address:* Rome.

RUSSIA

1901 **Engraph P. Kovalevsky.**

Member of the Scientific Committee of the Ministry of Public Instruction and Officer of the Special Missions at the University of Moscow, 1890; Secretary of the Imperial Senate, and delegate to the World's Columbian Exposition at Chicago, 1893; Director of the Pedagogical Section of the National Exhibition at Nijni Novgorod, 1896; same at Stockholm, 1897; Director of the Pedagogical Commission at the Paris Exposition and member of the International Jury of Awards, 1900; Author of various papers on Educational Subjects. *Address:* Catherine Canal 14, St. Petersburg.

HUNGARY

1901 **Béla de Tormay.**

Graduate of Budapest College and Royal University; Professor of Zoölogy in Agricultural School, 1865; Director, 1869; Director Budapest Veterinary Academy, 1875; Counselor in Royal Hungarian Ministry of Agriculture, 1886 to date; Author of various papers on Agricultural Topics; Corresponding Member of the Royal Academies of Hungary and Italy. *Address:* V. Nádor Utcza, Budapest.

ARGENTINE REPUBLIC

1901 **Joseph Benjamin Zubiaur**, LL.D., '84, Univ. of Buenos Ayres.

Professor and Assistant Supervisor of Normal Schools and National Colleges, 1881–84; Inspector of the Normal Schools and National Colleges, 1885–91; Delegate sent by the Minister of Public Instruction to the World's Exposition at Paris in 1889; Principal of the National College of Concepcion del Uruguay, 1892–98; Director of the Section of Education, 1899; Member of the National Board of Education, 1899; Delegate to the Pan-American Exposition from the Province of Entre Rios and General Board of Education of the Province of Corrientes, also Commissioner to Study the Elementary Schools and Adult Evening Schools of the United States, 1901. *Address:* Buenos Ayres, Argentine Republic

UNITED STATES OF BRAZIL

1901 **Alcides Medrado.**

Address: Care of Legation of the United States of Brazil, Washington, D. C.

A. Fontoura Xavier.

In Consular Service (various appointments), 1885–97; Consul General from Brazil to the United States, 1897; Plenipotentiary to Universal Postal Congress at Washington, 1901; Delegate to Second Pan-American Congress, Mexico, 1901. *Address:* Rio Janeiro, Brazil; *consular address:* 17 State St., New York, N. Y.

REPUBLIC OF CHILE

1901 **Julio Peres Canto**, LL.B., '90.

Secretary of the Society for the Industrial Development of Chile, Santiago, 1891–96; Commissioner of Chile at the Central American Exposition, 1897; Consul General of Chile to the Central American Republics, Guatemala, 1898; Delegate Secretary to the Pan-American Exposition of Buffalo (special commission), 1901. *Consular address:* Guatemala City, Guatemala, C. A.

Carlos Silva Cruz, Graduate University of Chile, 1899.

Professor of Spanish and Composition at the "Liceo Miguel Luis Amunátegui," Santiago, 1895; and at the "Institute Nacional de Chile," 1898; Chief of Section of Secondary, Superior, and Special Instruction of the Ministry of Public Instruction of Chile, 1899; Commissioner in charge of the Educational and Library Department of the Chile exhibit at the Pan-American Exposition of Buffalo, N. Y., and to study the organization of Educational Service of the United States, 1901. *Permanent Address:* 351 Breton St., Santiago, Chile; *United States Address:* Castle Inn, Delaware Ave., Buffalo, N. Y.

Giullermo Freudenburg Cristi, Ph.B., '97, B.L., '00, Univ. of Santiago, Chile.

Director and Chief of the School Department, Patronato Santa Filomena 1896; Commissioner Assistant of Chile to the Pan-American Exposition (educational department); Special Commissioner to Study the Educational Systems in the United States and Europe, 1901. *Address:* Casilla 841, Santiago, Chile; *United States address:* Castle Inn, Niagara Sq., Buffalo, N. Y.

REPUBLIC OF GUATEMALA

1901 **Dr. Joaquin Yela.**

Physician and Surgeon of the Faculties of Guatemala and San Francisco, Cal.; Founder and ex-Dean of the Guatemalan College of Pharmacy and Medicine; Guatemalan Commissioner to the Paris (1878) and Buffalo Expositions; Delegate to the Second and Third Pan-American Medical Congresses; Member of the Caballeros Hospitalarios Españoles of Madrid, Spain; Member of the Académie Nationale of Paris, France. *Address:* Guatemala City, Guatemala, C. A.; *consular address:* 4 Stone St., New York, N. Y.

REPUBLIC OF NICARAGUA

1901 **Don Alejandro Bermúdez**, M.T., T.E., A.M., '92, Inst. of Granada, Nicaragua.

Professor of Literature, National Institute, Guatemala, 1893; Member Pedagogical Congress of Guatemala; Inspector General of Finance of Nicaragua, 1898; Assistant Secretary of Promotion and Public Works of Nicaragua, 1899; Secretary of Legation of Nicaragua in Washington and Special Commissioner to Pan-American Exposition, 1901. *Address:* Care of Legation of Nicaragua, Washington, D. C.

Don Ramiro Gamez.

Address: Care of Legation of Nicaragua, Washington, D. C.

REPUBLIC OF COSTA RICA

1901 **Don Joaquin Bernando Calve.**

Address: Care of Legation of Costa Rica, Washington, D. C.

LIFE DIRECTORS, LIFE AND ACTIVE MEMBERS

ALABAMA

ACTIVE MEMBERS

1881 JOHN MASSEY, A.B., '62, A.M., '75, LL.D., '79, Univ. of Ala.
1876 President of Alabama Conference Female College, Tuskegee.

1882 JULIA SHUDWICK TUTWILER.
1886, Principal of Alabama Normal College, Livingston.

1888 JOHN HERBERT PHILLIPS, A.M., Marietta Coll., O.; Ph.D., Southern Univ., Ala.
1883, Superintendent of Schools, 2231, 7th Ave., Birmingham.

1894 LUCIEN V. LA TASTE.
General Agent, University Publishing Co. of New York; Box 564, Mont-

1895 MARY A. CAHALAN.
1884, Principal of the Powell School, 2311, 4th Ave., Birmingham.

J. B. CUNNINGHAM.
1898, Principal of High School, 1030 S. 21st St., Birmingham.

ROBERT ALEXANDER MICKLE, A.B., '86, Davidson Coll., N. C.
Principal, Jefferson St. Primary and Grammar Schools, 101 Georgia Ave., Mobile.

JAMES KNOX POWERS, A.M., '73, LL.D., '97, Univ. of Ala.
1901, Representative, B. F. Johnson Publishing Co., 619 Wesleyan Ave., Florence.

1808 ROBERT VENABLE ALLGOOD, B.Sc., '90, So. Univ., Greensboro; A.M., '93, Univ. of Nashville.
1894, Superintendent of Public Schools, 4312, 2d St., Avondale, Birmingham.

CHARLES A. BROWN, C.E., A. & M. Coll. of Ala.
1897. Principal of Henley School, 2130, 6th Ave., Birmingham.

J. F. ELLIOTT.
1900, Superintendent of Schools at Brookwood and Searles, Brookwood, Tuscaloosa Co.

J. D. MATLOCK.
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1899 DANIEL PINKNEY CHRISTENBERRY, Pd.B., '87, A.M., '88, Southern Univ., Greensboro, Ala.
1892, Professor of English, Southern University, Greensboro.

1900 JOHN W. ABERCROMBIE, A.B., '86, Oxford Coll.; LL.B., '88, Univ. of Ala.
1902, President, University of Alabama, University.

LUCIEN P. GIDDENS.
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1896, President, Birmingham Business College, 1909½-1917½, 1st Ave., Birmingham.

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1901 JOSEPH M. DILL, A.M., Howard Coll., Ala.
1901, Superintendent of City Schools, 124, 22d St., Bessemer.

ISAAC W. HILL, A.B., '80, A.M., '83, Emory Coll., Georgia.
1896, Superintendent of City Schools, Gadsden.

JAMES ALEX. MOORE.
Secretary, Alabama Girls' Industrial School, Montevallo.

H. O. MURFEE, B.Sc., '92, Marion Mil. Inst.; A.B., A.M., '97, Univ. of Va.
Assistant Superintendent and Professor of Physics, Marion Military Institute, Marion.

JOHN LAKE PARKER.
1900, Member, Board of Education, 1913, 1st Ave., Birmingham.

FRANCIS M. PETERSON, A.M., D.D., '00, Southern Univ., Greensboro, Ala.
1899, President of Alabama Girls' Industrial School, Montevallo.

MRS. J. H. PHILLIPS.
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1902 ERNEST F. FENOLLOSA, A.B., Harvard Univ.
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1889, Superintendent of City Schools, 205 High St., Montgomery.

H. C. GUNNELS, A.B., '86, LL.B., '91.
1902, State Superintendent of Education, Capitol, Montgomery.

INSTITUTIONS

1807 ALABAMA POLYTECHNIC INSTITUTE.
President, Charles Coleman Thach: Acting Librarian, William O. Scroggs. Auburn.

1899 STATE NORMAL SCHOOL AT JACKSONVILLE.
President, William Clarence Daugette, Jacksonville.

1901 AGRICULTURAL AND MECHANICAL COLLEGE OF ALABAMA.
President, W. H. Councill: Librarian, Loretta V. Brownlow, Normal.

STATE NORMAL COLLEGE.
Principal, E. M. Shackelford, Troy.

ARIZONA

ACTIVE MEMBERS

1890 Ferris S. Fitch, A.B., '77, Univ. of Mich.
1902, Chancellor of the University of Arizona, Tucson.
1899 Frank Yale Adams, A.B., '88, A.M , '97, St. Lawrence Univ.
1902, President of University of Arizona, Tucson.
William J. Anderson, B.Sc., '97, National Univ., Chicago.
1899, Territorial Normal School, Tempe; res., S. 12th Ave., Phœnix.
Edward J. Berringer.
1901, Principal Teacher, Indian School, Ft. Mojave.
Mrs. Sidney C. Botkin.
Matron of Indian School, Mohave City.
William B. Creager, A.B., '95, Ind. State Univ.
1895, Superintendent of City Schools, California Ave., Phœnix.
A. J. Matthews.
1900, President, Territorial Normal School, Tempe.
1900 Milton J. Needham.
1901, Superintendent and Special Disbursing Agent, Western Navajo School, Algert.
1901 William W. Ewing.
Principal Teacher, Moqui Indian Training School, Keams Cañon.
Laura Howe.
1898, Government Indian Service, Sacaton
Horace G. Wilson.
1902, Superintendent of San Carlos Indian School, San Carlos.
1902 R. A. Cochran.
Superintendent of Indian School, Talklai.
Sherman M. Woodward, M.Sc., '93, Washington Univ., St. Louis, Mo.; A.M., '96, Harvard.
1896, Professor of Mathematics and Mechanics, University of Arizona, Tucson.

INSTITUTIONS

1901 Normal School of Arizona.
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Northern Arizona Normal School.
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ARKANSAS

ACTIVE MEMBERS

1887 Thomas A. Futrall, A.M., West Tenn. Coll.; LL.D., '00. Univ. of Ark.
1895, Examiner Public-School Teachers for Lee Co., Marianna.
1895 George B. Cook. A.M.
Superintendent of City Schools, 200 Garden St., Hot Springs.
W. W. Rivers, A.B., '86, A.M., '89, Univ. of Miss.
1901, President of Central College, Conway.
1896 Howard Gates.
1902, Principal of Peabody High School, 517 W. 5th St., Little Rock.
J. H. Hinemon, A.M., '94, Arkadelphia Coll., and '02, Univ. of Nashville.
1902, State Superintendent of Public Instruction, 815 Center St., Little Rock.
Alfred Lee Peacher, A.M., '92, Wooster Univ., O.
1895, Superintendent of Schools, 806 Broadway, Van Buren.
1897 John Hugh Reynolds, A.B., '93, Hendrix Coll.; A.M., '97, Univ. of Chicago.
1902, Professor of History and Political Science, Univ. of Arkansas, Fayetteville.
1898 Joseph Carter Corbin, A.M., '60, Ph.D., '99, Ohio Univ.
1873, President of Branch Normal College, 1821 W. 2d Ave., Pine Bluff.
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Superintendent of City Schools, Little Rock.
1899 J. J. Doyne.
1898, State Superintendent of Public Instruction, Little Rock.
James H. Witherspoon, A.B., '92, Univ. of Tenn.
1895, Principal of High School, 302 W. 17th Ave., Pine Bluff.
1900 J. D. Van Winkle.
District Manager, B. F. Johnson Publishing Co., 1023 N. 14th St., Ft. Smith.
1901 Christopher Columbus Black.
1902, Principal of High School, Mulberry.
B. H. Caldwell.
1901, President, Normal College, Pea Ridge.
J. H. Caldwell.
Superintendent of City Schools, Harrison.
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1897, Assistant Principal of Howard High School, 912 N. G St., Ft. Smith.
E. O. Trent.
Principal of Howard High School, 901 N. 9th St., Ft. Smith.
1902 B. W. Torreyson.
Superintendent of City Schools, Ft. Smith.

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1897 Hendrix College.
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1901 University of Arkansas, Library.
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CALIFORNIA

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1877 Mrs. Anna Kalfus Spero.
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1879 James Harmon Hoose, A.M., '64, Ph.D., '73, Syracuse Univ.
1896, Department of Philosophy and History, University of Southern California, 255 S. Euclid Ave., Pasadena.
1882 Harriet N. Morris, A.M., '86, Nat. Nor. Univ.
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Editor "Co-operative Journal," 634, 18th St., Oakland.
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1898, Principal of Mission High School, 310 Pine St., San Francisco.
1889 Mrs. Augusta W. Classen.
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ACTIVE MEMBERS

1888 J. P. Greeley.
1889, Superintendent of Schools of Orange Co., Courthouse, Santa Ana.
1889 Sanford A. Hooper, A.B., '72, A.M., '82, Beloit Coll.
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1893, President of State Normal School, 631 W. 5th St., Los Angeles.
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1899, President of State Normal School, Powell St., near Clay, San Francisco.
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1898, Associate Professor of Education, Leland Stanford Jr. University, Stanford University.
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1899, Superintendent of City Schools, 611 Hickey St., Santa Ana.
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1895 D. R. Augsburg, B.P., '84, Syracuse Univ.
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Lewis B. Avery, B.Sc., '83, Tabor Coll., Ia.
1895, Principal of Union High School, Redlands.
Walter J. Bailey, A.M., '00, Bates Coll.
1901, Principal, Los Angeles Military Academy, Commonwealth Ave., Los Angeles.
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1895, Vice-President of State Normal School, 825 W. 11th St., Los Angeles.
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1890, Instructor in State Normal School, 1007 W. 21st St., Los Angeles.
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1899, State Superintendent of Public Instruction, Sacramento.
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1896, Principal of 28th St. School, 434 E. Adams St., Los Angeles.
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1902, Acting Professor of Pedagogy in Throop Polytechnic Institute, 22 W. California St.,Pasadena.
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1894, Professor of History and Director of University Extension, University of California, Berkeley.
1897 Frank H. Ball.
1900, Director of Manual Training, Throop Polytechnic Institute, 162 Oakland Ave., Pasadena.
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1896, Professor of Education, and Principal of Normal School, Throop Polytechnic Institute, 377 N. Los Robles Ave., Pasadena.
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1896, Director of Kindergarten Training Department, State Normal School, Bellevue Terrace Hotel, Los Angeles
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1891, Professor of Physics, Leland Stanford Jr. University, Stanford University.
1898 James A. Barr.
1891, Superintendent of City Schools, 1407 E. Channel St., Stockton.
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1900, President of State Normal School, San José.
David Starr Jordan, M.Sc., Ph.D., M.D., LL.D.
1891, President of Leland Stanford Jr. University, Stanford University.

CALIFORNIA—*Continued*

1898 Anna E. Lemon.
1894, Teacher in First Primary, Lincoln Building, 50 S. Euclid Ave., Pasadena.
Cecil Wirt Mark, B.Sc., '88, Univ. of Pacific, Cal.
1900, Member of Board of Education, 1007 Dolores St., San Francisco.
Julius Irving Read, A.B., '94, Dartmouth Coll.
1902, Vice-Principal of Union High School, Box 245, Oroville.
1899 Osmer Abbott, A.B., '90, Oberlin Coll.; Ph.D., '98, Jena.
1899, Principal of Washington Union High School, Rural Route 2, Fresno.
James E. Addicott.
1891, Teacher of Manual Training and Mathematics, 55 George St., San José; temporary address, Teachers College, Columbia University, New York.
Lulu Claire Bahr.
1901, Superintendent of City Schools, 223 7th St., San Bernardino.
Thomas Pearce Bailey, Jr., A.B., '87, A.M., '89, Ph.D., '91, Univ. of So. Cal.
820 W. 11th St., Los Angeles
William Howard Baker, A.M., P.T., St. Nor. Sch., Kirksville, Mo.
1900, Instructor of Mathematics, State Normal School, 322 S. 7th St., San José.
Hugh J. Baldwin.
1899, County Superintendent of Schools, Courthouse, San Diego.
Miss Lew A. Ball.
1898, Teacher in Garfield School, 558, 13th St., Oakland.
Honora D. Cannon.
Primary Teacher, Public Schools, Oxnard.
Frederick H. Clark, A.M., '86, Univ of Cal.
1889, History Department, Lowell High School, San Francisco; res , 1418 Myrtle St., Oakland.
F. A. Cooley, A.B., '92, Stanford Univ.
1901, Principal of Union High School, Clovis.
Minnie Coulter, A.B., '98, Stanford Univ.
1899, Superintendent of Schools of Sonoma County, Santa Rosa.
Jesse George Cross, A.M., '68, McKendree Coll.
1900, Professor in Throop Polytechnic Institute, Pasadena; res., Monrovia.
Frank P. Davidson, A.B., '78, A.M., '80, Wittenberg.
1898, Superintendent of City Schools, Sefton Block, San Diego.
Anna E. Edwards.
1890, Teacher of Eighth Grade, City Schools, 1837 3d St., San Diego.
Walter A. Edwards, A.B., '83, A.M., '86 LL.D.,'02, Knox Coll.
1897, President of Throop Polytechnic Institute, Pasadena.
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1899, Superintendent of Schools, Santa Barbara Co., Santa Barbara.
Richard Douglas Faulkner, B.L., '77, Univ. of Ill.
1895, Principal, Franklin Grammar School, San Francisco.
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1896, Pacific Coast Agent of The Macmillan Co., 325 Sansome St., San Francisco.
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1892, Superintendent of Schools, 500 Ellis St., Pasadena.
Lyman Gregory, M.D., '87, Chicago Hom. Med. Coll.
1899, Teacher of Physiology in High School, 400 W. 30th St., Los Angeles.
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1899, Instructor in Philosophy, University of California, Berkeley.
1899 Frank Morton, A.B., '80, Dartmouth.
1888, Principal of Lowell High School, 3331 Washington St., San Francisco.

CALIFORNIA—*Continued*

Ernest H. Mosher.
1897, Principal of Schools, Benicia.
F. O. Mower, A.B., '78, Bates Coll., Lewiston, Me.
1897, Principal of High School, 715 3d St., Napa.
M. M. Parker, A.M., '78, Wesleyan Univ.
516 E. California St., Pasadena.
Minnie E. Rees.
Teacher in City Schools, 632 Britannia St., Los Angeles.
Mrs. Julia Cole Sherwood.
1902, Principal of School, Lower Lake.
Mrs. Hattie Burdick Shorkley.
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David S. Snedden, A.B., '97, Stanford Univ.; A.M., '01, Columbia Univ.
1901, Instructor in Education, Leland Stanford Jr. University, Stanford Univ.
Edwin Diller Starbuck, A.B., Indiana Univ.; A.M., Harvard Univ.; Ph.D., Clark Univ.
1897, Assistant Professor of Education, Leland Stanford Jr. University, Stanford University.
F. W. Stein, Jr.
1899, Principal of Harper School, 1350 Newton St., Los Angeles.
Anna M. Stovall.
1891, Principal of Free Normal Training School of Golden Gate Kindergarten Association, Hearst Kindergarten Building, 560 Union St., San Francisco.
John Harvey Strine.
1898, County Superintendent of Schools, Room 47, Courthouse, Los Angeles; permanent address, Monrovia.
Francis A. Swanger M.S.D., '92, Mo. State Nor. Kirksville; A.M., '98, Willamette Univ., Ore.
1899, Principal of High School, Woodland.
John Swett, A M. (honorary), Dartmouth Coll.
Martinez.
G. S. Trowbridge, B.Sc., '80, A.M., '82, Iowa State Univ.
1902, Principal of Union High School, Santa Paula.
Louis K. Webb, B.Sc., '78, Univ. of Mich.; A.M., '98. Stanford Univ.
1901, Principal of John Swett Union High School, Crockett.
Reginald Heber Webster, A.B., '77, A.M., '82, Univ. of Cal.
1897, Superintendent of Schools in and for the City and County of San Francisco, City Hall, San Francisco.
Daniel H. White.
1899, Superintendent of Schools, Solano County, Fairfield.
M. Ida Williams, A.B., '99, Stanford Univ.
1899, Teacher in Public Schools, 139 N. Delacey St. Pasadena.
1900 Arthur W. Gray, A.B., '96, Univ. of Cal.
1900, Teacher of Physics, Chemistry, and Mathematics, Merced County High School; P. O. Box 183, Merced.
George Arthur Merrill, B.Sc., '88, Univ. of Cal.
1894, Principal of California School of Mechanical Arts, and (1901) Director Wilmerding School of Industrial Arts, 16th and Utah Sts., San Francisco.
1901 Estelle Carpenter.
Supervisor of Music, City Schools, and in State Normal School, 1626 O'Farrell St., San Francisco.
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1902, Teacher in Sherman Institute, Riverside.
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1897, Professor of Biology, State Normal School, Los Angeles.
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1899, Teacher in Government Indian School, Perris.
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Principal of Los Nietos Valley Union High School, Downey.
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1900, Superintendent and Special Disbursing Agent, Hoopa Valley Indian School, Hoopa.
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1901, Principal of Merced County High School, Merced.
Harry M. Shafer, B.Sc., '87, M.Sc., '90 Eureka Coll.; A.B., '99, A.M., '00, Harvard Univ.
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1902, Principal of Placer County High School, Auburn.
Mary Forman Ledyard.
1898. Supervisor of Kindergartens, City Schools, West Lake Hotel, Los Angeles.
Hasbrouck O. Palen.
Educational Department, Milton Bradley Co., 122 McAllister St., San Francisco.
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Teacher in Graded School, Chula Vista.
Benjamin Ide Wheeler, A.B., '75, A.M., '78, Brown Univ.; Ph.D., '85, Heidelberg Univ.; LL.D., '96, Princeton; '00, Harvard and Brown; '01, Yale; '02, Johns Hopkins.
1899, President of the University of California, Berkeley

CALIFORNIA—*Continued*

INSTITUTIONS

1895 University of California.
President, Benjamin Ide Wheeler; Librarian, J. C. Rowell, Berkeley.
1897 Leland Stanford Junior University.
President, David Starr Jordan; Librarian, Melvin Gilbert Dodge, Stanford University.
Public Library of San Francisco.
Secretary, George A. Mullin, San Francisco.
State Normal School at Chico.
President, C. C. Van Liew; Librarian, Susan T. Smith, Chico.
State Normal School at Los Angeles.
President, Edward T. Pierce; Librarian, Elizabeth H. Fargo, Los Angeles.
1898 State Normal School Library, San Jose.
President, Morris Elmer Dailey; Librarian, Ruth Royce, San José.
1890 Pomona College, The.
President, George A. Gates; Acting Librarian, F. A. Bissell, Claremont.
State Library of California.
Librarian, J. L. Gillis, Sacramento.
1900 Public Library, Los Angeles.
Librarian, Mary L. Jones, Los Angeles.

COLORADO

LIFE DIRECTOR

1885 Ezekiel Hanson Cook, A.B., '66, A.M., '69, Bowdoin Coll.; Ph.D., '89, Colgate Univ. 2429, 12th St., Boulder.
1888 Aaron Gove, A.M., '78, Dartmouth Coll.; LL D , '88, Univ of Colo.
1874, Superintendent of Schools, District No. 1, High School, Denver.

LIFE MEMBER

1886 Frank Howard Clark, B.Didac., '83, Univ. of Kan.; A.M., '01, Univ. of Colo.
1899, Superintendent of City Schools, Spruce St., Central City.

ACTIVE MEMBERS

1884 James H. Baker, A.B., '73, A.M., '76, LL.D., '92, Bates Coll.
1892, President of University of Colorado, Boulder.
Robert H. Beggs, B.Sc., '68, Ill. Coll.; M.Sc., '00, Ft. Worth Univ.; A.M., '00, Denver Univ.
1880, Principal of Grammar School, 2427 Ogden St., Denver.
1887 Charles V Parker, B.Sc., '97, Denver Univ.
1899, Superintendent of City Schools, 601 Baca St., Trinidad.
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1891, President of State Normal School of Colorado, Greeley.
1892 Lewis C. Greenlee, '78, State Nor. Sch., Edinboro, Pa.; A.M., '95, Waynesburg Coll., Pa.
1890, Superintendent of Schools, Dist. No. 2, 549 S. Tremont St., Denver.
William Henry Smiley, A.B., '77, Harvard Univ.
1892, Principal of High School, Dist. No. 1, 2112 Lincoln Ave., Denver.
1893 Charles A. Bradley, '77, U. S. Military Acad.
1894, Principal of Manual Training High School, 1341 Corona St., Denver.
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1899, Principal of Garfield School, 2030 N. Nevada Ave., Colorado Springs.
1894 Edgar Rollin Downs, A.B., '76, A.M., '81, Williams Coll.
1900, Superintendent of City Schools, 822, 3d Ave., Durango.
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J. S. McClung.
1879, Superintendent of Schools, Dist. No. 1, 421 W. 11th St., Pueblo.

COLORADO—*Continued*

1895 **Dora M. Moore.**
1893, Principal of Corona School, 1031 Emerson St., Denver.
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1902, President of Colorado School of Mines, Golden.
Emanuel Stuver, B.Sc., '77, M.Sc., '85, Nat. Nor. Univ., Lebanon, O.; M.D., '80, Ohio Med. Coll.; Ph.D., '95, Wyo. Normal and Scientific Coll.
Rohling Block, Ft. Collins.

1896 **O. J. Blakesley**, B.Sc., Pd.D.
1896, Superintendent of City Schools, La Junta.
Mrs. Z. X. Snyder.
Greeley.

1897 **Izora Scott**, A.B., '87, Kan. Nor. Coll.
1899, Principal of High School, 220 Pitkin St., Pueblo.

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1892, Principal of Elmwood School, 357 Lincoln Ave., Denver.

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1898, Professor of Psychology and Education, University of Colorado, Boulder.
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1898, Professor of Philosophy and Education, University of Denver, University Park.

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1855, Manager of New Britain Library, 9 Camp St., New Britain.
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1902, Superintendent of Schools, Mason St., Greenwich.

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1892, Principal of Old Saybrook High School, Saybrook.

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1899, Superintendent of Schools, South District, 82 Weathersford Ave., Hartford.

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1895, Director of New Haven Normal School of Gymnastics, 46 York Sq., New Haven.

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1890, Supervisor of Music, 526 West Ave., Bridgeport.

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1897, Superintendent of Schools, 30 Fairview St., Waterbury.

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1890, Superintendent of Schools, 74 Gardner St., Ansonia.

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1884, Supervising Principal of North School District, 104 Gillett St , Hartford.

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1898, Supervising Principal, City Schools, and (1901) Lecturer in Pedagogy, Yale University, 285 Willow St., New Haven.

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1895, Principal of Training Department, State Normal School, Willimantic.

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1888, Principal of Rockville High School and Superintendent of East District Graded School, Vernon; res., Rockville.

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1902, Fellow in English, Yale University, 438 Elm St , New Haven.

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1867, Professor of Geology, Wesleyan University, 31 College Pl., Middletown.

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1896, Superintendent of Schools, 31 Emmons Pl., New Britain.

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1900, Supervisor of Manual Training, Connecticut School for Boys, Meriden.

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1896, Supervisor of Penmanship, Public Schools, 403 Edgewood Ave., New Haven.

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1900, Supervising Principal of Dwight District, 387 Edgewood Ave., New Haven.

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1890, Professor of English Language, Wesleyan University, 165 Broad St., Middletown.

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1899, Principal of School, Farmington.

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1876, Principal of Howard High School, 206 E. 10th St., Wilmington.

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Author and Publisher, Newark.

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1888, Principal of High School, 822 Adams St., Wilmington

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1889, Director of Physical Training, Public Schools, Webster School, 10th and H Sts., Washington.
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1895, Teacher, Deanewood.
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1890, Supervisor, Washington Public Schools, Wallach School, S. E., Washington.
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1874, Supervising Principal of Schools, 1126, 5th St., N. W., Washington.
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1887, Principal of Brent School, 507 E. Capitol St., Washington.
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1890, Agent, Bureau of Education for Alaska, Bureau of Education, Washington.
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1887, Teacher of German, Central High School, 1338 Q St., Washington.
Mrs. Louise E. Hogan.
Author of books for and about children, and Editor-in-chief of "The Children's Library," Box 205, Washington.
Hosmer M. Johnson.
1900, Supervising Principal, Public Schools, Washington; res., Chestnut St., Anacostia.
Artemas Martin, A.M., '77 Yale; Ph.D., '82, Rutgers; LL.D., '85, Hillsdale; Fellow of the A. A. A. S., Member of the London, Edinburgh, and N. Y. Mathematical Societies.
U. S. Coast and Geodetic Survey, 915 N. St., N. W., Washington.
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Superintendent of Industrial Home School, Wisconsin Ave., Station A, Washington.
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1890, Professor of Mathematics, Howard University, Washington.
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1900, Assistant Superintendent of Public Schools, 1912, 11th St., N.W., Washington.
Lovick Pierce, A.B., '60, Emory Coll.
1893, Chief Clerk in Bureau of Education, 46 New York Ave., N. W., Washington.
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1894, Statistician in U. S. Bureau of Education, Washington.

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1899, Principal of High School, 326 T St., N. W., Washington.

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1900, Supervising Principal, Tenth Division Public Schools, Cook School, Washington.

1899 Victor S. Clark, A.B., '90, Univ. of Minn.
1804, 17th St., N. W., Washington.

Arthur U. Craig, B.Sc., '95, Univ. of Kan.
1901, Teacher of Mechanical Drawing, Armstrong Manual Training School, 905 U St., N. W., Washington.

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1866, Professor and Vice-President, Gallaudet College, 3 Kendall Green, Washington.

Merrill Edwards Gates, Ph.D., LL.D., L.H.D., Princeton, Univ. of Rochester, Columbia Coll., Williams Coll.
1899, Secretary of U. S. Board of Indian Commissioners, 1429 New York Ave., Washington.

Charles D. Rakestraw, A.M., Univ. of Va.
Supervisor of U. S. Indian Schools, Indian Office, Washington.

1900 Louis L. Hooper, A.B., '89, A.M., '98, Harvard Univ.
1900, Head Master, Washington School for Boys, 4401 Wisconsin Ave., Washington.

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1900, Superintendent of Schools, 16, 4th St., S. E., Washington.

1901 Miss M. E. Given.
1898, Principal of Chevy Chase School, 1419 U St., Washington.

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1900, Editor, "National Geographic Magazine," 1328, 18th St., Washington.

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1892, State Superintendent of Public Instruction, Tallahassee.

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1893, County Superintendent of Public Instruction, Bartow.

1896 Nathan Benjamin Young, A.B., '88, A.M., '91, Oberlin Coll.
1901, President, State Normal and Industrial School, Tallahassee.

1897 J. M. Guilliams, A.B., Central Nor. Coll., A.M., '98
1902, Superintendent of East Florida Seminary, Gainesville.

David Williams.
Principal of School, Brandon.

1898 Ludwig Wilhelm Buchholz, Nor. Sch., Pr. Friedland, Germany.
1901, Principal of Department of Pedagogy, Florida State College, Tallahassee.

1899 H. Elmer Bierly, A.B., '92, Princeton Univ.
1898, Professor of Experimental Psychology and Child Study, Florida State College, Tallahassee.

1900 Benella Davenport.
1900, Vice-Principal and Teacher of Latin and Literature, State Normal School, De Funiak Springs.

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1897, Director of the Business College, John B. Stetson University, DeLand.

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Superintendent of Education, Hillsborough County, 1706 Highland Ave., Tampa.

Miss Clem Hampton.
1901, Principal of High School, Gainesville.

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1901, Superintendent of Public Schools, De Land.

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1902, Principal of High School, Indian River Hotel, Titusville.

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1895, Department of English, State Normal School, 1148 Cobb St., Athens.

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1896, Superintendent of Schools, Savannah.

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1891, Superintendent of City Schools, Dearing St., Athens.

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1892, Principal of Boys' High School, 142 Jackson St., Atlanta.

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1894, State School Commissioner, Capitol, Atlanta.

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1897, President of North Georgia Agricultural College, Dahlonega.

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1890, Superintendent of Public Schools, Hawkinsville.

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1898, President of National Agricultural College and Experiment Station; 207 Milledge Ave., Athens.

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1897, Assistant Superintendent of Schools and Secretary of Board of Education, 105 Smith St., Atlanta.

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1902, Professor of Biology and Agriculture, North Georgia Agricultural College, Dahlonega.

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1879, Superintendent of Public Schools, 336 Courtland St.. Atlanta.

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1898, Training Teacher, State Normal and Industrial College, Milledgeville.

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1901, President, Georgia Military Academy, College Park (near Altanta).

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1902, Chair of Science, Morris Brown College, 47 Bradley St., Altanta.

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1896, Superintendent of Schools, 318, 11th St., Columbus.

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1895, Instructor in English Language and Literature, State Industrial College, College.

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1899, Chancellor of University of Georgia, University Campus, Athens.

1900 **B. K. Benson**.
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1891, President, State Industrial College, College.

1901 **Dudley R. Cowles**, L.I., '95, William and Mary Coll., Williamsburg, Va.
1902, Southern Representative Silver, Burdett & Co., 135 Whitehall St., Atlanta.

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1895, Superintendent of Public Schools, Waycross.

Jere M. Pound.
Superintendent of Schools, Office of Board of Education, Macon.

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1899, Physical Director, Public Schools, English-American Bldg., Atlanta.

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1892, Superintendent of Schools, Griffin.

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IDAHO

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1895, President of State Normal School, Lewiston.

1899 **Permeal French**.

1898, State Superintendent of Public Instruction, Boise.

1901 **H. Moreland Cook**, Ph.B., '01, A.M., '02, Taylor Univ., Upland, Ind.

1902, Superintendent of City Schools, cor. Pine and 4th Sts., Wallace.

Arthur E. Farmer, Pd.B., '95, Mich. St. Coll.; B.Sc., '97, Mt. Hope Coll., O.

1900, Superintendent of Public Schools, Silver City.

J. Walter Johnson.

Superintendent of Public Schools, Caldwell.

James A. MacLean, A.B., '92, Univ. of Toronto; A.M., '93, Ph.D., '94, Columbia Univ.

1900, President of the University of Idaho, Moscow.

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Editor, "School and Home Education," Bloomington.

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Educational Publisher, 521 Wabash Ave., Chicago.

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1886, Attorney and Counselor at Law, Suite 511, Ashland Block, Chicago.

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1894, President of University of Illinois, President's House. Champaign.

1889 **O. F. Barbour**.

1866, Principal of Kent School, 512 N. Court St., Rockford.

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1899, President of Northern Illinois State Normal School, De Kalb.

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Peleg R. Walker.

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1901, Vice-President of Illinois Congress of Mothers; res., 602 Lexington Ave., Elkhart.

H. B. Wilson.
1902, Superintendent of City Schools, Franklin.

William A. Wirt, Ph.B., '98, De Pauw Univ.
1899, Superintendent of Public Schools, 524 W. Washington St., Bluffton.

1901 Elbert Bradner, B.Sc., '93, Tri-State Nor. Coll., Angola, Ind.
1901, Special Teacher, Public Schools, near cor. Webster St. and Union Ave., Ashley.

Albert A. Campbell, A.B., '97, Univ. of Mich.
1901, Superintendent of City Schools, 372 E. 5th St., Peru.

Mrs. Esse Bissell Dakin, B.Sc., '80, Cornell Univ.
1892, Head of Department of Mathematics, High School, 410 W. Washington St., South Bend.

Manfred W. Deputy, B.Sc., '92, So. Ind. Nor. Coll.
1897, County Superintendent of Schools, Vernon.

Albert H. Douglass.
1891, Superintendent of Schools, 1219 Market St., Logansport.

Wilbur A Fiske, A.M., De Pauw Univ.
1891, Instructor in Physical Science, High School, Glen Heights, Richmond.

Hal L. Hall, A.B., '99, Ind. Univ.
1900, Principal of High School, Peru.

Alice Louise Harris.
1902, Supervisior of Primary Schools, Evansville.

Franklin S. Hoyt, B.Sc., '93, Boston Univ.
1901, Assistant Superintendent of Schools, 1807 N. Delaware St., Indianapolis.

INDIANA—*Continued*

1901 **J. H. Jeffrey**, A.B., '98, Ind. Univ.
1901, Superintendent of City Schools, Gas City.

A. E. Martin, B.Sc., Nor. Ind. Nor. Sch.; A.B., Ind. Univ.
1901, Superintendent of Public Schools, High School Building, Greenfield.

S. B. McCracken, A.B., '92, Ind. Univ.
Principal of High School, 508 Pigeon St., Elkhart.

A. G. McGregor, A.B., '97, Ind. St. Univ.; A.B., '00, Harvard Univ.
1900, Superintendent of Schools, 942 N. Harrison St., Rushville.

L. A. McKnight.
1899, Superintendent of Benton County Schools, Fowler.

Charles S. Meek, A.B., Univ. of Ind.
1901, Superintendent of Schools, Elwood.

Mary S. Mulligan.
Supervisor of Instruction, 306 W. 12th St., Anderson.

James B. Pearcy, Ph.B., '88, Butler Univ.
Principal of High School, 208 W. 13th St., Anderson.

Oscar Morton Pittenger, A.B., '96, Ind. Univ.
1898, Assistant Principal, High School, 225 E. 13th St., Anderson.

George F. Quick.
Treasurer of School Board, 233 W. 11th St., Anderson.

George L. Roberts, A.B., '94, Ind. St. Univ.
1901, Superintendent of City Schools, 257 W. Washington St., Frankfort.

Francis M. Stalker, A.B., '84, A.M., '87, Princeton Univ.
1892, Associate Professor of Psychology, Indiana State Normal School, 666 Swan St., Terre Haute.

George W. Suman, A.M., Valparaiso Coll., Ind.
Representing National Educational Company, New York and Chicago; res., S. Jefferson St., Rochester.

Alexander B. Thompson.
1897, County Superintendent of Schools, 822 W. 5th St., Marion.

Charles H. Wood, B.Sc., '83, Nat. Nor. Univ.
1894, Superintendent of City Schools, 65 E. Jefferson St., Valparaiso

George W. Worley.
1899, County Superintendent of Schools, and (1901) Member of State Board of Education, 316 S. High St., Warsaw.

1902 **Oscar R. Baker**.
Superintendent of Schools, 150 Seventh St., Winchester.

Homer B. Dickey.
1900, Superintendent of Public Schools, Greentown.

C. H. Drybread, A.B., '90, Indiana Univ.
Superintendent of City Schools, 620 N. Jefferson St., Hartford City.

Henry S. Schell, A.B., '90, A.M., '91, Butler Coll., Irvington, Ind.
1899, Superintendent of Schools, Clinton.

Milo H. Stuart, A.B., '98, Indiana Univ.
Teacher in Manual Training High School, Indianapolis; home address Sheridan.

Daniel Webster Tucker, A.B., '99, Indiana Univ
Graduate Student, Indiana University, R.F.D. 5. Kokomo.

INSTITUTIONS

1895 **Wabash College**.
President, William P. Kane; Librarian, H. S. Wedding, Crawfordsville.

1897 **Indiana State Library**.
State Librarian, W. E. Henry, State House, Indianapolis.

Indiana State Normal School.
President, William W. Parsons, Terre Haute

Valparaiso College and Northern Indiana Normal School.
President, H. B. Brown; Librarian, O. P. Kinsey, Valparaiso.

1899 **Indiana University Library**.
President, William Lowe Bryan; Librarian, George F. Danforth, Bloomington.

1900 **Butler University**.
President, Scot Butler; Librarian, D. C. Brown, Indianapolis.

INDIAN TERRITORY

LIFE MEMBER

1884 **George Beck**, M.Sc., '63, Univ. of Mich.
1901, School Supervisor, Chickasaw Nation, Tishomingo.

ACTIVE MEMBERS

1900 **Elihu B Hinshaw**, A.B., '86, '90, Hiwassee Coll.
1897, Superintendent of Bloomfield Seminary, and 1901 Chickasaw National Normal Director and President of Examining Board.

1902 **John D. Benedict**.
1899, Superintendent of Schools for Indian Territory, Muskogee.

Alice M. Robertson, A.M., '85, Elmira Coll.
1900, Supervisor of Schools, Creek Nation, Muskogee.

IOWA

LIFE DIRECTOR

1889 ***William Miller Beardshear**, A.B., '76, A.M., '79, LL.D., '85.
1891, President of Iowa State College of Agriculture and Mechanical Arts, Ames.

LIFE MEMBERS

1884 **William A. Willis**, A.B., '62, A.M., '65, Beloit Coll.
Proprietor and Principal of Iowa City Academy, 308 Church St., Iowa City.
1889 **Rt. Rev. John J. Keane**, D.D., Laval; LL.D., Harvard.
1900, Archbishop of Dubuque, Dubuque.

ACTIVE MEMBERS

1884 **Hamline H. Freer**, B.Sc., '69, M.Sc., '78, A.B., '80, A.M., '83, Cornell Coll., Iowa.
1872, Professor of Science and Art of Teaching and Political Economy, Cornell College, Mt. Vernon.
William Fletcher King, A.B., '57, A.M., '60, Ohio Wesleyan Univ.; D.D., '70, Ill. Wesleyan Univ.; LL.D., '87, State Univ. of Iowa and Ohio Wesleyan Univ.
1863, President of Cornell College, Mt. Vernon.
Henry Sabin, A.M., Amherst Coll.; LL.D., '93, Drake Univ.; '94, Cornell Coll.; '95, State Univ. of Iowa.
Ex-State Superintendent of Public Instruction, 210 Manhattan Block, Des Moines.
Homer H. Seerley, Ph.B., '73, B.D., '75, A.M., '76, State Univ. of Iowa; LL.D., '98, Penn Coll.
1886, President, State Normal School, 2403 Normal St., Cedar Falls.
1890 **Ozro Patterson Bostwick**, A.B., '78, Lombard Coll., Ill.
1889, Superintendent of Schools, 313 8th Ave., Clinton.
1894 **Ashley Van Storm**, Ph.B., '98, Ill. Wesleyan Univ.
1898, Superintendent of City Schools, Cherokee.
1895 **James Johnson Billingsly**, B.Sc., '92, N. Ind. Nor. Univ.
1898, Superintendent of Public Schools, Sanborn.
M. E. Crosier.
1902, Superintendent of Schools, Avoca.
E. D. Y. Culbertson, B.D., '89, State Normal School, Cedar Falls, Ia.
512 Crocker Building, Des Moines.
O. E. French.
1895, Superintendent of City Schools, 602 N. Maple St., Creston.
P. C. Hayden.
1900, Teacher of Music, Public Schools, 729 Franklin St., Keokuk.
Joseph Jasper McConnell, A.B., '76; B.Didac., '78, A.M., '80, State Univ. of Iowa.
1901, Superintendent of Public Schools, 1724 B Ave., Cedar Rapids.
W. A. McCord.
1898, General Agent, Rand, McNally & Co., Educational Department, Box 361, Des Moines.
J. J. Nagel, Ph.B., '98, Wesleyan Univ., Bloomington, Ill.
1870, Principal Grammar School No. 4, 906 W. Locust St., Davenport.
Etta Suplee.
Supervisor of Primary Training, State Normal School, Cedar Falls.
Fannie Suplee.
1894, Principal of Public School, 1045 9th St., Des Moines.
James E. Williamson, A.M., '82, Wabash Coll.
1892, Superintendent of City Schools, Fairfield.
1896 **Amphias H. Avery**.
1902, Superintendent of City Schools, 400 E. 6th St., Spencer.
Richard C. Barrett, A.M., '94, Cornell Coll.
1898, State Superintendent of Public Instruction, 913 8th St., Des Moines.
John Franklin Brown, Ph.B., '89, A.M., '95, Earlham Coll.; Ph.D., '96, Cornell.
1901, Assistant Professor of Education and Inspector of High Schools, University of Iowa, Iowa City.
George I. Miller, B.Sc., '77, M.Sc., '97, Iowa State Coll.
1886, Superintendent of Public Schools of Ames; res., 427 Story St., Boone.
Franklin T. Oldt, A.M.
1895, Superintendent of City Schools, 1240 Locust St., Dubuque.
Austin Norman Palmer.
President of Cedar Rapids Business College and Editor of "Western Penman," Cedar Rapids.
Hattie Adelia Phillips.
1895, Supervisor of Kindergartens, 1159 26th St., Des Moines.
James L. Thatcher, B.L., '93, Univ. of Wis.
1900, Principal of School, 712 E. 15th St., Davenport.
J. B. Young, A.B., '61, A.M., '64, Middlebury Coll.
1878, Superintendent of Schools, 422 E. 14th St., Davenport.
1897 **Eugene Brown**, B.Sc., '92, Iowa State Coll.
1900, President of Midland Normal School, 505-507 W. State St., Mason City.
Jacob Leonard Buechele, Ph.B., '86, Cornell Coll., Iowa.
1896, Superintendent of City Schools, Independence.
Horace T. Bushnell.
1873, Principal of Grammar School No 8, Farnam St. and South Ave., Davenport.
C. P. Colgrove, A.M., '96, Univ. of Chicago.
1896, Professor of Psychology and Didactics, State Normal School, 2422 Normal St., Cedar Falls.
Mrs. E. Dudley, A.B., '84, A.M., '87, Cornell Coll.
1890, Assistant Principal in High School, Paullina.

*Died Aug. 5, 1902.

IOWA—*Continued*

1897 Lyman H. Ford, A.B., '92, A.M., '93, Univ. of Wooster.
1899, Superintendent of Schools, 821 Boone St., Webster City.
Irene Garrette.
Principal of Jefferson School, 708 3d Ave., Cedar Rapids.
B. J. Horchem.
1898, Principal of Audubon School, 315 Bluff St., Dubuque.
F. E. Lark.
1896, Superintendent of Schools, Monona County, Onawa.
George Edwin MacLean, Ph.D., '83, Leipzig; LL.D., '95, Williams.
1899, President of the State University of Iowa, Iowa City.
V. L. Wilson.
Agent for American Book Co., Ottumwa.
Finley M. Witter, B.Sc., A.M., '76, University of Iowa.
1901, Superintendent of Schools, Muscatine County, cor. 4th and Cherry Sts., Muscatine.
1898 Edson N. Coleman, A.M., '89, Bellevue Coll.
1900, Superintendent of City Schools, 15th St. and 4th Ave. S., Ft. Dodge.
Mary Ziek.
1899, Principal of Madison School, 417 1st St. W., Cedar Rapids.
1899 William I. Crane, A.B., '00, Ohio Univ., Athens.
1902, Superintendent of Schools, Marshalltown.
1900 Henry L. Adams, B.Sc., '97, Upper Iowa Univ.
1900, County Superintendent of Schools, West Union.
Frederick E. Bolton, B.Sc., '93, M.Sc., '96, Univ. of Wis.; Ph.D., '98, Clark Univ.
1900, Professor of Science and Art of Education, State University of Iowa, 1019 College St., Iowa City.
William Bayard Craig, A.M., '85, St. Univ. of Iowa; D.D., '93, Univ. of Colo.; LL.D., '97, Drake Univ.
1897, Chancellor of Drake University, 2702 University Ave., Des Moines.
I. C. Hise.
1898, County Superintendent of Schools, Le Mars.
Thomas B. Hutton, B.Sc., '91, Iowa St. Coll.
1900, Superintendent of Public Schools, Odebolt.
L. E. A. Ling.
1891, Superintendent of City Schools, Cresco.
Samuel H. Sheakley, A.B., '83, A.M., '86, Theil Coll., Pa.
1899, Superintendent of City Schools, 1418 Pleasant St., Des Moines.
Charles Eldred Shelton, A.M., '82, LL.D., '02, Iowa Wes. Univ.
1899, President of Simpson College, Indianola.
1901 Hill McClelland Bell, A.B., '90, A.M., '91, Drake Univ.
1902, Dean of College of Liberal Arts, and 1900, Vice-Chancellor Drake University. 1091 26th St., Des Moines.
Anson H. Bigelow, B.Sc., '87, Univ. of Neb.
1900, Superintendent of City Schools, Le Mars.
Freeman H. Bloodgood, B.Sc., '90, Upper Iowa Univ.
1900, Superintendent of City Schools, 304 Mulberry St., Waterloo.
Nellie L. Elliott.
Teacher in 7th Grade, City Schools, 2106 Cottage Grove Ave., Des Moines.
Lena C. Freitag.
1901, Teacher in Grammar Grade, Lincoln School, 608 N. Court St., Ottumwa.
Francis M. Fultz, Ph.B., '86, A.M., '89, St. Univ. of Iowa.
1899, Superintendent of City Schools, 321 S. Gunnison St., Burlington.
Tanetta Gilliland, A.B., '95, A.M., '98, Lake Forest Univ.
1902, Instructor in Biology in East Side High School, 1005 Des Moines St., Des Moines.
Fred E. Hansen.
1900, Superintendent of Schools of Story Co., Nevada.
Amos Hiatt, A.B., '70, A.M., '76, Univ. of Iowa.
1885, Superintendent of East Side Schools. 1003 E. 12th St., Des Moines.
J. Percival Huggett, M.Didac., '92, Iowa St. Nor. Sch.
1899. Professor of Pedagogy, Coe College, and Instructor in Pedagogy and University Examinations, State University, Iowa City, 125 N. 12th St., Cedar Rapids.
J. M. Hussey, M.Sc., Chillicothe Nor. Sch.; Pd.B., Western Nor. Coll.
1893, President of the Western Normal College, Shenandoah.
J. C. King.
Superintendent of City Schools 120 Story St., Boone.
J. P. McKinley.
Superintendent of Schools, of Osceola County, Sibley.
O. J. McManus, B.Didac., '94, M.Didac., '96.
1900, County Superintendent of Schools, 1162 E. Pierce St., Council Bluffs.
George A. Moore, A.B., '95, Denison Univ., O.
Instructor in Mathematics, Cedar Valley Seminary, Osage.
Adnah Clifton Newell, B.Sc., in E.E., '92, Univ. of Mich.
1894, Supervisor of Manual Training, West Des Moines; res., 1514 Woodland Ave., Des Moines
W. H. Norton.
Professor of Geology, Cornell College, Mt. Vernon.
Malcolm W. O'Dell.
1901, Superintendent of Indian School, Toledo.
Annie E. Packer, M.Sc., Whittier Coll, Iowa.
Superintendent of Schools of Henry County, 207 E. Washington St., Mt. Pleasant.
Eugene C. Peirce, A.B., '90, Albion Coll.
1890, Principal of High School, 303 W. 4th St., Ottumwa.

IOWA—*Continued*

1901 W. A. Pratt, A.M., O. Wes. Univ.
1900, Superintendent of Public Schools, Washington.

H. J. Schwietert.
1899, County Superintendent of Schools, Courthouse, Manchester.

Z. C. Thornburg, B.Didac., '93, M.Didac., '96.
Superintendent of Schools of Polk Co., 502 Youngerman Boul., Des Moines.

1902 J. W. Atchley, B Didac., M.Didac., St. Nor Sch., Cedar Falls, Ia.
Principal of Schools, Avoca.

W. Bell.
Principal of High School, 304 N. Lincoln St., Creston.

Edith E. Brant.
1902, Supervisor of Music, East District, Public Schools, 1222 Capitol Ave., Des Moines.

L. C. Bryan, M.Didac., '96, Iowa St. Nor. Sch.
Principal of Public Schools, Dayton.

Clara May Budde, Grad., 1900, St. Mary's Acad , Prairie Du Chien, Wis.
Teacher in Public Schools, Marcus.

H. W. Chehock.
Principal of Schools, Thompson.

Mrs. Frances E. Clark.
Supervisor of Music, 215 W. 4th St., Ottumwa.

J W. Dickman, Ph.M., '02, Upper Iowa Univ.
Vice-President, Upper Iowa University, Fayette.

Alice E. Duffy.
1900, Principal of Marion High School. Waukon.

F. W. Else, A.B., '96, Penn Coll.; A.M., '97, Haverford Coll., Pa.; M.Didac., '01, Iowa St. Nor. Sch.
1899, Superintendent of City Schools, 309 N. Lincoln St., Mt. Pleasant.

A. T. Erwin, B.Sc. M.Sc (Agri.), Iowa St. Coll.
Instructor in Horticulture, Iowa State College, Ames.

Hermon A. Farr.
Student, University of Wisconsin; home address, Wauconia.

Clementine Jacobs.
Teacher in Primary Grade, Public Schools, Guttenberg.

Mattie D. Jacobs.
Teacher in Public Schools, Guttenberg.

J. J. Louis, Ph.B., St. Univ. of Iowa.
1901, Superintendent of Schools, Harlan.

W. H McCauley.
President of Capital City Commercial College, 4th St. and Grand Ave. Des Moines.

A. W. Meyer, A.B., '99, Iowa Coll.
Principal of Schools, Alton.

C. E. Miller, M.Didac., Iowa St. Nor. Sch.
1902, Superintendent of Schools of Keokuk County, Sigourney.

Thomas Nicholson, A.B., '93, A.M., '95, Northwestern Univ.; D.D., '98, Iowa Wes. Univ.
1894, Professor of Philosophy and Biblical Literature, Cornell College, Mt. Vernon.

H C. Price, B.Sc. (Agri.), Ohio St. Univ.; M.Sc. (Agri.), Cornell Univ
1900, Professor of Horticulture, Iowa State College, Ames.

Guy L. Rawson, B. L. ,'97, Upper Iowa Univ.
1900, Principal of Schools, Arlington.

Henry H. Roberts, Ph.B., Cornell Univ.
Teacher in Public Schools, 1306 Third Av. N., Ft. Dodge.

W. A. Sheaffer, Ph.B., '01, Findlay Coll.
1902, Instructor in Mathematics and English, Commercial High School, Sioux City.

W. M. Stevens.
Superintendent of City Schools, 1911 Pierce St., Sioux City.

William H. Stoner.
General Agent for American Book Co. in Iowa, 692 17th St., Des Moines.

J. E. Webb.
1880, Superintendent of Schools, Elkader.

Clara A. Wilson.
1894, Supervisor of Drawing, City Schools, 2035 Grand Ave., Davenport.

Mrs. G. T. Wilson, Grad. Northwestern Sch. of Oratory, Evanston, Ill.
1902, Director of Department of Oratory, Western College, Toledo.

INSTITUTIONS

1897 State Normal School, Cedar Falls.
President, H. H. Seerley, Cedar Falls.

State University of Iowa.
President, George Edwin MacLean; Librarian, Mrs. Bertha G. Ridgway, Iowa City.

1900 Iowa College.
President, Dan F. Bradley; Librarian, M. H. Douglass, Grinnell.

1901 Iowa State College Library.
Acting-President, E. W. Stanton; Librarian, Vina E. Clark, Ames,

1902 "Midland Schools."
Editor, Walter S. Athearn, 2423 Atkins St., Des Moines,

KANSAS

LIFE DIRECTOR

1886 A. V. Jewett, A.B., '57, Middlebury Coll., Vt.
Abilene.

LIFE MEMBERS

1886 Anderson Griffith Campbell.
Council Grove.
Nathaniel Coover.
Attorney at Law, Wilson.
Edward T. Fairchild.
1897, Superintendent of City Schools, Ellsworth.
Henry G. Larimer, LL.B., '81, Univ. of Mich.
Attorney at Law, 535 Kansas Ave., Topeka.
A. H. Limbrick.
Secretary of Chautauqua Assembly, Winfield.
John MacDonald.
Editor "Western School Journal," 734 Kansas Ave., Topeka.
Peter McVicar, A.B., '56, A.M., D.D., '71, Beloit Coll., Wis.
1895, President Emeritus of Washburn College, College Ave., Topeka.
J. H. Miller.
Holton.
Thomas Watson Roach, A.B., '70, M.Sc., '90, Mt. Union Coll., Alliance, O.
1892, Superintendent of Kansas Wesleyan Business College, Salina.
George E. Rose, B.D., '83, Univ. of Kan.; M.Sc., '98, Kan. St. Agri. Coll.
1893, Principal of High School, 846 Burnett St., Kansas City.
Thomas A. Sawhill, A.B., '74, Amherst Coll.
Postmaster, Concordia.
Aaron Schuyler, A.M., '60, O. Wes. Univ.; LL.D., '73, Otterbein; Ph.D., '98, Kan. Wes. Univ.
Professor of Philosophy and Higher Mathematics, Kansas Wesleyan University, 1316 S. Santa Fé St., Salina.
Edmund Stanley, A.M., '91, Penn Coll., Oskaloosa, Ia.
1898, President of Friends' University, 1813 University Ave., Wichita.
D. C. Tillotson.
621 Filmore St., Topeka.
Philo Jesse Williams, A.M., '57, Madison Univ.; D.D., '76, Univ. of Kan.
Baldwin.

ACTIVE MEMBERS

1884 J. N. Wilkinson.
1901, President, State Normal School, 832 Merchant St., Emporia.
1890 William M. Davidson.
1892, Superintendent of Schools, 710 W. 8th St., Topeka.
Arvin S. Olin, A.B., '92, Ottawa Univ.; A.M., '94, Univ. of Kan.
1899, Professor of Education, University of Kansas, 1134 Louisiana St., Lawrence.
1891 Frank R. Dyer, A.M., '88, M.Pd., '93, Ohio Nor. Univ.; A.M., '92, Ohio Wesleyan Univ.
1902, General Agent, Prudential Insurance Co., 609 N. Topeka Ave., Wichita.
1893 Francis Huntington Snow, A.B., '62, A.M., '65, Ph.D., '81, Williams Coll.; LL.D., '90, Princeton.
1866, Professor of Natural History, University of Kansas, Lawrence.
1894 Elva Enola Clarke.
1893, Librarian of State Normal School, 1025 Constitution St., Emporia.
O. P. M. McClintock.
1897, Principal of Clay School, 1259 Buchanan St., Topeka.
1895 O. P. Barnes.
Western Agent, Ginn & Co., Leavenworth.
Jessie L. Clark.
1892, Supervisor of Music, Public Schools, 1203 N. Market St., Wichita.
Fenella Dana.
1889, Principal of Ward School, 1017 Tyler St., Topeka.
Miss M. E. Dolphin
1896, Superintendent of City Schools, Leavenworth.
Leida H. Mills.
1895, Assistant in High School, 1203 N. Market St., Wichita.
Maggie S. Mitchell, B.Sc., Geneva Coll., Pa.
1879, Teacher in Public Schools, 509 W. 6th St., Topeka.
L. H. Murlin, A.B., '91, S.T.B., '92, De Pauw Univ.; D.D., '97, Cornell Coll.; S.T.D., '97, Denver Univ.; B.D., '99, Garrett Biblical Inst.
1804, President of Baker University, Baldwin.
Miss C S. Newell
1890, Teacher in Public Schools, 917 W. 14th St., Topeka.
David F. Shirk.
1893, Superintendent of City Schools, 330 E. 10th St., Newton.
Edward A. Simerwell.
1892, Principal of Grant School, 1209 N. Western Ave., Topeka.
Nathan T. Veatch.
1901, Superintendent of City Schools, 523 Mound St., Atchison.
1807 Mrs. Gaston Boyd.
Teacher of Voice and Physical Culture, Main St., Newton.
Charles A Boyle.
1893, Director of Department of Music, State Normal School, 831 Constitution St., Emporia.
L. A. Lowther, A.B., '94, State Univ.
1896, Superintendent of City Schools, 617 Exchange St., Emporia.
H. B. Peairs.
Superintendent of Haskell Institute, Indian Industrial Training School, Lawrence.

KANSAS—*Continued*

1897 **Walter G. Riste.**
1902, Principal of Norton County High School, Norton.
Frank P. Smith A.B., '78, Ind. Univ.; A.M., '90, Baker Univ.
1894, Superintendent of City Schools, 900 Tennessee St., Lawrence.
1899 **Frederick B. Abbott**, Ph.D., '98, Martyn Coll.
1898, Teacher of Manual Training, State Normal School, Emporia; Temporary Address, 98 Comstock Ave., Providence, R. I.
John H. Glotfelter.
1901, Principal of Training Department, State Normal School, 1025 State St., Emporia.
T. S. Johnson.
1898, Superintendent of City Schools, S. Walnut St., McPherson.
Frank Nelson, Ph.B., '92, Iowa St. Univ.
1899, State Superintendent of Public Instruction, 213 Topeka Ave., Topeka.
John W. Spindler, A B., '76, A.M., '95, Ohio Wes. Univ.; B.L., '82, Cincinnati Law School.
1891, Superintendent of City Schools, 1212 Menor St., Winfield.
1900 **Thomas B. Henry**, A.B., '98, Univ. of Kan.
1899, Instructor in Mathematics, Montgomery County High School, Independence.
John W. Wilson, A.B.
Principal of Atchison County High School, Effingham.
Lizzie E. Wooster.
Author and Schoolbook Publisher, 519 Harrison St., Topeka.
1901 **Carrie Goddard.**
Principal of Garfield School, 1009 Topeka Ave., Topeka.
E. H. Heacock, B.Sc., '94, M.Sc., '95.
Vice-Principal, Department of Chemistry and Physics, High School, 420 W. 7th St., Topeka.
Horace Z. Wilber.
1902, Critic Teacher, Grammar School Grades, Kansas State Normal School, 710 Market St., Emporia.
1902 **R. F. Knight.**
Superintendent of City Schools, City Hall, Wichita.
Richard Nevin Pemberton.
Representative of D. C. Heath & Co., 1509 Fillmore St., Topeka.
Frank Strong, A.M., Ph.D., Yale.
1902, Chancellor, University of Kansas, Lawrence.

INSTITUTIONS

LIFE MEMBERS

1886 **Board of Education, Abilene.**
President, Mrs. Mary Hamilton; Secretary, W. P. Gulick.
Board of Education, Dodge City.
President, T. L. McCarty; Clerk, W. T. Coolidge.
Board of Education, City of Ottawa.
President, A. W. Benson; Clerk, Miss Hattie Muzzy.
Board of Education, Sedgwick.
Superintendent, R. A. Hampshire; Clerk, G. P. Schouten.
Riley County Educational Association.
President, Francis Thackrey, Manhattan; Secretary, Ira N. Chapman, Milford.
Teachers' Association of Cowley County.
President, Julia B. King; Secretary, Edna M. Glass, Winfield.

ACTIVE MEMBERS

1897 **Kansas State Agricultural College.**
President, Ernest R. Nichols; Librarian, Mrs. Henrietta Calvin, Manhattan.
1899 **Midland College.**
President, Rev. Jacob A. Clutz; Librarian, Robert J. Peters, Atchison.
1900 **Free Public Library, Topeka.**
President, Edward Wilder; Librarian, Mrs. E. S. Lewis, Topeka.

KENTUCKY

LIFE MEMBER

1877 **William Henry Bartholomew**, LL.D., '02, Ky. St. Coll.
1881, Principal of Girls' High School, 426 E. Gray St., Louisville.

ACTIVE MEMBERS

1891 **McHenry Rhoads**, A.M., West Ky. Coll.; Ph.M., Hartford Coll.
1900, Superintendent of City Schools, 525 Griffith Ave., Owensboro.
1893 **Edgar H. Mark.**
1894, Superintendent of Schools, Center and Walnut Sts., Louisville.
1894 **Susie M. Bartholomew.**
426 E. Gray St., Louisville.
1895 **Livingstone McCartney.**
1902, Superintendent of Schools, cor. Center and Green Sts., Henderson.
1896 **Frank S. Alley**, A.M., Moore's Hill Coll., Ind.
1896, Superintendent of City Schools, 304 Taylor Ave., Bellevue.

KENTUCKY—*Continued*

1896 W J. McConathy.
1895, Principal of Normal School, 1454, 2d St., Louisville.

John Morris, A.M., '02, Ohio Univ., Athens.
1895, Superintendent of Public Schools, 829 Scott St., Covington.

Ida Rudolf.
1895, Principal of the Monsarrat School, 2427 W. Chestnut St., Louisville.

Edward Taylor, A.M., '78, Earlham Coll., Richmond, Ind.
1894, Superintendent of Schools, 1109 College St., Bowling Green.

Louise A. Wiard.
Teacher in Eighth Grade, Public Schools, Frankfort.

1897 J. G. Crabbe, A.B., A.M., Ohio Wes. Univ.; M.Pd., Ohio Univ.
1890, Superintendent of City Schools, 316 E. Winchester Ave., Ashland.

Reuben Post Halleck, A.M., Yale.
Principal of Boys High School, 1240, 3d Ave., Louisville.

Anna C. Roth.
1887, Teacher in Seventh Grade, Duncan St. School, 2441 W. Chestnut St., Louisville.

1898 John Wirt Dinsmore, A.M., '02, Berea Coll.
1900, Dean of Normal Department, Berea College, Berea.

A. C. Kuykendall, A.B., '91, Burrett Coll.
1898, Teacher of Mathematics, South Kentucky College, Hopkinsville.

Miles Eugene Marsh, A.B , '93, Oberlin Coll.
Principal of Academy of Berea College, Berea.

William H. Perry, A.M., '92, Ky. St. Univ.
Principal, Public Schools, 2909 W. Walnut St., Louisville.

1900 Harry G. Brownell, B.Sc., '86, Rose Polytechnic Inst., Ind.
1895, Principal of Manual Training High School, 1900 Brook St., Louisville.

S. L. Frogge, A.M., '80, Bethel Coll.
Superintendent of City Schools, 317 3d St., Frankfort.

Charles B. Hatfield.
1900, Superintendent of City Public Schools, 232 N. 7th St., Paducah.

Elizabeth B. Walsh.
1900, Supervisor of Primary Work, 1036 5th St., Louisville.

1901 James W. Bradner, B.Sc., '94, A.B., 96, Tri-State Nor. Coll.
Principal of High School, Caster St., Ashland.

A. H. Hill.
1897, County Superintendent of Schools, 10 Cedar St., Franklin.

John D. Kelly, LL.B., '93, Univ. of Louisville.
1899, Principal of City School, 716 Mildred St., Owensboro.

W. T. St. Clair, A.B., '80, A.M., '94, Centre Coll., Ky.
1886, Professor of Latin, Male High School, 418 W. Oak St., Louisville.

F. F. Thwing, A.B., '89, Oberlin Coll.
1892, Instructor in Mathematics, Manual Tr. High School, 2219 Brook St., Louisville.

Callie King Walls.
1893, Teacher of Mathematics, English, and History, High School, The Lawrence, West 18th St., Covington.

1902 B. F. Cabell, A.M., Ohio Wes. Univ.
President of Potter College, Bowling Green.

Geo. W. Clinton, A.M., '94, Livingstone Coll., Salisbury, N.C.
President of Atchinson College, Madisonville.

Faustin S. Delany, A.M., '96, Wilberforce Univ., Ohio.
Principal of Central (Colored) High School, 1321 W. Walnut St., Louisville.

C. W. Houser, M.D., 1900.
Teacher of Mathematics, High School, 2813 W. Chestnut St., Louisville.

LOUISIANA

ACTIVE MEMBERS

1889 Miss Marion Brown.
1895, Principal of New Orleans Normal School, 1303 3d St., New Orleans.

1892 George Soulé.
President of Soulé Commercial College and Literary Institute, 603 St. Charles St., New Orleans.

1894 Edwin A. Alderman, Ph.B., Univ. of N. C.; D.C.L., '96, Univ. of the South; LL.D., '99, Tulane Univ., La.; LL.D., '02, Johns Hopkins Univ.
1900, President of Tulane University of Louisiana, New Orleans.

Miss H. A. Suter.
1878, Principal of McDonogh High School No. 2, 636 Jackson Ave., New Orleans.

1895 Warren Easton, A.B., '71, St. Univ. of La.
1888, Superintendent of Schools, 1628 State St., New Orleans.

1896 B. C. Caldwell.
1896, President of State Normal School, Natchitoches.

J. G. Haupt.
1216 Parkerson Ave., Crowley; home address, Lake Charles.

Eveline A. Waldo.
1901, Principal, St. Mary's Parish Kindergarten Training School, Franklin.

1897 Clara G. Baer, Grad., '91, Posse Gymnasium, Boston.
1891, Professor of Physical Education, Newcomb College, 1532 Washington Ave., New Orleans.

Brandt V. B. Dixon, A.B., '70, A.M., '73, LL.D., '93.
1887, President of H. Sophie Newcomb Memorial College, 1220 Washington Ave., New Orleans.

LOUISIANA—*Continued*

1900 C. H. Carson, Jr., A.B., '83, Emory Coll., Oxford, Ga.
1898, Professor of Chemistry and Physics, Louisiana Industrial Institute, Ruston

1901 Nicholas L. A. Bauer, B.Sc., '97, A.M., '99, Tulane Univ.
1901, Assistant Superintendent of Public Schools, 331 Chartres St., New Orleans

John R. Conniff, A.B., '94, Tulane Univ.
1901, Assistant Superintendent of Public Schools, 1416 Marengo St., New Orleans.

R. W. Perkins, A.B., '72, A.M., '75, Ph.D., '93, Bucknell Univ.
1901, President of Leland University, 7013 St. Charles Ave., New Orleans.

1902 Catherine Kelly.
Principal of McDonogh School No. 1, 2915 Camp St., New Orleans.

Lizzie Kelly.
Principal of McDonogh School No 4, 2915 Camp St., New Orleans.

INSTITUTION

1901 New Orleans Normal School.
Principal, Miss Margaret C. Hanson, 1142 Constance St., New Orleans.

MAINE

LIFE DIRECTOR

1886 Josiah Little Pickard, LL.D., '70, Chicago Univ. and Beloit Coll.; '94, Bowdoin Coll.
Ex-President, State University of Iowa; res. with Dr. George T. Little, Bowdoin College, Brunswick.

LIFE MEMBER

1889 Edmund Wentworth Wright, A.B., '66, A.M., '69, Harvard Coll.
1901, Principal of High School, Old Orchard.

ACTIVE MEMBERS

1890 Merritt Caldwell Fernald, A.B., '61, A.M., '64, Ph.D., '81, LL.D., '02, Bowdoin Coll.
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1892 W. J. Corthell, A.B., '57, A.M., '60, Waterville Coll., LL.D., '88, Colby Univ.
1879, Principal of State Normal School, Gorham.

1895 John S. Locke.
1893, Superintendent of Schools; President of York Institute. 42 Middle St., Saco.

William Wallace Stetson.
1895, State Superintendent of Public Schools, Auburn.

1898 Charles F. Cook, A.B., '91, St. Lawrence Univ.
1896, Principal of Cony High School, 52 State St., Augusta.

Franklin Winslow Johnson, A.B., '91, A.M., '94, Colby Univ.
1894, Principal of Coburn Classical Institute, 6 Dalton St., Waterville.

1901 Myron E. Bennett.
1899, Superintendent of Schools, Sanford.

Bertram C. Richardson, A.B., '98, Colby Coll.
1900, Superintendent of Schools, cor. Goff and Court Sts., Auburn.

Walter Earle Russell, A.B., '93, Wesleyan Univ.
1894, Department of Natural Science, State Normal School, Gorham.

Charles L. White, A.B., '87, A.M., '90, Brown Univ.; D.D., '02, Bowdoin Coll.
1900, President of Colby College, 33 College Ave., Waterville.

MARYLAND

LIFE MEMBER

1876 Sarah E. Richmond.
1875, Vice-Principal of State Normal School, 2508 Madison Ave., Baltimore.

ACTIVE MEMBERS

1885 Henry A. Wise, Grad. of Virginia Military Inst.
1900, First Assistant Superintendent of Schools, 6 E. Mulberry St., Baltimore.

1890 William C. Stevenson, Grad. '89, Kan. St. Nor. Sch.; LL.B., '02, Columbian Univ.
1900, Head of Commercial Department, The Jacob Tome Institute, "Cedarhurst," Port Deposit.

1891 John E. McCahan, A.M., '69, Dickinson Coll., Pa.
1884, Assistant Superintendent of Public Schools, 1719 Hollins St., Baltimore.

1892 Elijah Barrett Prettyman, A.B., '48, A.M., '52, LL.D., '97. Dickinson Coll., Pa.
1900, Principal of State Normal School and Secretary of State Board of Education, 1200 W. Lafayette Ave., Baltimore.

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1891, Superintendent of Instruction, School Administration Building, Baltimore.

1894 Sarah C. Brooks.
1899, Principal of Teachers' Training School, 1214 Madison Ave., Baltimore.

Eli M. Lamb.
1864, Associate Principal of Friends' School, 1432 McCulloh St., Baltimore.

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English Instructor in Friends' School, 1516 Linden Ave., Baltimore.

1896 Daniel C. Gilman, A.B., A.M., LL.D., Yale and Harvard.
President, The Carnegie Institution of Washington; res., 614 Park Ave., Baltimore.

Harry Marc Rowe, Ph.D., '92, Waynesburg Coll.
Secretary and Treasurer, Sadler, Rowe & Co., 9 W. German St., Baltimore.

MARYLAND—*Continued*

1897 Zachariah C. Ebaugh.

1900, Principal of Franklin High School, Reisterstown.

1898 E. E. Cates, A.B., '83, A.M., '88, Colby Univ.

1897, President of Frederick College, Frederick.

Thomas Fell, Ph.D., LL.D.

1886, President of St. John's College, Annapolis.

Elmer Gates.

Director of Laboratory of Psychology and Psychurgy, Chevy Chase Circle, Chevy Chase.

A. J. Gminder.

1896, Principal in English-German Public School No. 7, 1111 Barclay St. Baltimore.

Abram W Harris, A.B., '80, A.M., '83, Wesleyan Univ.: Sc.D., '94, Bowdoin; LL.D.'00, Univ. of N. Brunswick; LL.D., '02, Univ. of Me.

1902, Director of the Jacob Tome Institute, Port Deposit

Edmund D. Murdaugh.

Principal State Normal School No 2, Frostburg.

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State Superintendent of Public Education, 1200 Lafayette Ave., Baltimore

John Thomas White, Grad., '78, Mercersburg Coll.; A.B., '78, A.M., '84, Franklin and Marshall Coll., Lancaster, Pa.

1900, Secretary, Treasurer, and Examiner, Board of School Commissioners, 24 S. George St., Cumberland.

1899 A. Marshall Elliott, A.B., '66, A.M., '78, Haverford Coll.; A.B., '68, Harvard: Ph.D., '77, Princeton; LL.D., '91.

1876, Professor in Johns Hopkins University, 935 Calvert St., North Baltimore.

Thomas Crawford Galbreath, A.M., '97, W. Md. Coll., Westminster.

1899, Superintendent of Public Schools of Harford County, Bel Air.

Edward H. Griffin, D.D., Amherst; LL.D., Princeton.

1889, Professor of the History of Philosophy and Dean of the College Faculty, Johns Hopkins University, Baltimore.

Harlan Updegraff, A.M., '98, Columbia Univ.

1902, Principal of Girls' Latin School, Baltimore.

1900 William C. A. Hammel.

1888, Department of Physics, Zoölogy, and Manual Training, State Normal School, and (1901) Director of Manual Training, Bryn Mawr School, 2529 McCulloh St., Baltimore

Edwin Hebden.

Principal, Group "A" Public Schools; res., Tuxedo Park, Baltimore.

Mrs. Elizabeth E. Pippin.

Vice-Principal, High School, Denton.

1901 Virgil Mores Hillyer, A.B., '97, Harvard Univ.

Head Master, Calvert Primary School, W. Chase St., Baltimore.

Jacob Grape, A.B., '86, A.M., '89, St. John's Coll., Annapolis, Md.

1902, Group Principal of Schools, 1806 N. Charles St., Baltimore.

1902 Henry Harold Ballard, A.B., '88, Ph.D., '93, Johns Hopkins Univ.

1897, Master of Mathematics, Country School for Boys of Baltimore, 1622 Mt. Royal Ave., Baltimore.

Albert S. Cook, A.B., '95, Princeton Univ.

Examiner of Baltimore County, Towson.

INSTITUTIONS

1898 Jacob Tomb Institute.

Director, A. W. Harris; Librarian, Mary R. Caldwell, Port Deposit.

1899 Johns Hopkins University.

President, Ira Remsen; Librarian, N. Murray, Baltimore.

The Woman's College of Frederick.

President, J. H. Apple; Librarian, Susan Garrott, Frederick.

MASSACHUSETTS

LIFE DIRECTOR

1887 Mrs. Mary Hanchett Hunt.

1880, National, and, 1888, International, Superintendent of Scientific Temperance Instruction, Woman's Christian Temperance Union, 23 Trull St., Boston.

LIFE MEMBERS

1884 John Bascom, LL.D., '73, Amherst Coll.; D.D., '75, Iowa Coll.; LL.D., '97, Williams Coll.

1891, Professor of Political Science, Williams College, Park St., Williamstown.

1886 William Augustus Mowry, A.M., Brown Univ.; Ph.D., Bates Coll.

Writer and Lecturer, 17 Riverside Sq., Hyde Park.

ACTIVE MEMBERS

1884 Frank A. Fitzpatrick.

93 Summer St., Boston.

1888 George B. Hurd.

1901, Master of Payson Hall, Williston Seminary, Main St., Easthampton.

Will S. Monroe, A.B., '94, Stanford Univ.

1896, Department of Pedagogy and Psychology, State Normal School, Westfield.

1890 Albert Gardner Boyden, A.M., '61, Amherst Coll.

1860, Principal of State Normal School, Bridgewater.

John E. Bradley, Ph.D., '79, Univ. of N. Y.; LL.D., '93, Williams Coll.

1901, District Superintendent of Schools, Randolph.

MASSACHUSETTS—*Continued*

1890 Arthur P. Smith.
11 High St., Waltham.

1891 Granville Stanley Hall, A.B., '67, A.M., '70, LL.D., '89, Williams Coll.; Ph.D., '78, Harvard Univ.; LL.D., '88, Univ. of Mich. and '02, Johns Hopkins Univ.
1888, President of Clark University, 94 Woodland St., Worcester.

Daniel C. Heath, A.B., '68, A.M., '71, Amherst Coll.
1876, Educational Publisher, 420 Boylston St., Boston.

Amy Morris Homans.
1889, Director of Boston Normal School of Gymnastics, 97 Huntington Ave., Boston.

Ray Greene Huling, A.B., '69, A.M., '72, D.Sc., '94, Brown Univ.
1893, Head Master of English High School, 101 Trowbridge St., Cambridge.

Albert Leonard, A.B., '88, A.M., '91, Ohio Univ., Ph.D., '94, Hamilton Coll.
Care of Houghton, Mifflin & Co., Boston.

A. Eugene Nolen, A.B., '67, A.M., '70, Yale.
1881, Teacher of Greek and Latin, High School, 3 Wood Pl., Fitchburg.

Alvin F. Pease, A.B., '75, A.M., '78, Brown Univ.
1898, With N. E. Publishing Co. and Winship's Teachers' Agency, 29A Beacon St., Boston.

Elizabeth H. Perry.
1891, Teacher of Drawing, State Normal School, Bridgewater.

John Tilden Prince, Ph.D., '89, Leipzig
1881, Agent for Massachusetts Board of Education, 15 Temple St., West Newton.

1892 Orlando Merriam Baker.
Publisher, 499 Main St., Springfield.

Milton Bradley.
Treasurer and Manager, Milton Bradley Co., 515 State St., Springfield.

John S. Clark.
Treasurer, Prang Educational Co., 110 Boylston St., Boston.

Charles W. Eliot, A.B., '53, Harvard; LL.D., '69, Williams, Princeton; '70, Yale.
1869, President of Harvard University, 17 Quincy St., Cambridge.

Gilman C. Fisher, A.B., '69, A.M., '86, Colby Univ.
1898, Superintendent of Schools, Castle St., Great Barrington.

Robert C. Metcalf.
1902, Superintendent of Schools, Winchester.

William Wells Tapley.
Manager, Educational Department, Milton Bradley Co., Springfield.

George Augustus Walton, A.M., Williams Coll.
Ex-Agent, State Board of Education from 1869–95, 68 Chestnut St., West Newton.

Henry N. Wheeler, A.B., '71, A.M., '75, Harvard.
1882, Superintendent of Educational Department, Houghton, Mifflin & Co., 4 Park St., Boston.

Arthur K. Whitcomb, A.B., '73, Dartmouth.
1891, Superintendent of Schools, 2 Belmont St. Lowell.

Albert Edward Winship, Litt. D., '98.
Editor of "Journal of Education," 29A Beacon St.

1893 Francis Cogswell, A.M., '81, Harvard.
1874, Superintendent of Schools, 257 Prospect St., Cambridge.

Frank Irving Cooper.
Wayland.

Ernest Henry Johnson, A.B., '91, A.M., '92, Brown Univ.
1896, Master of Williams School, Chelsea; home address, 234 Mauran Ave., East Providence, R. I.

George H. Martin, A.M., '81, Amherst Coll.
1892, Supervisor of Schools, Boston; res., 388 Summer St., Lynn.

Charles Cornell Ramsay, A.B., A.M., '92, Harvard.
Fall River.

Edwin P. Seaver, A.M., LL.B., Harvard.
1880, Superintendent of Schools, School Committee Rooms, Mason St., Boston.

Charles Herbert Thurber, Ph.B , '86, Cornell; A.M., '90, Haverford Coll.; Ph.D., '00. Clark Univ.
1900, Editor for Ginn & Co., Publishers, 29 Beacon St., Boston.

1894 Frederick Elmer Chapman.
1890, Director of Music, Cambridge Public Schools, 126 Oxford St., North Cambridge.

Benjamin C. Gregory, A.B., Coll. of City of N. Y.; L.H.D., Rutgers Coll., N. J.
1902, Superintendent of Schools, 19 Forsyth St., Chelsea.

1895 Sarah Louise Arnold, A.M., (honorary), '02, Tufts Coll.
1902, Dean of Simmons College, Boston; res., 21 Institution Ave., Newton Centre.

Thomas M. Balliet.
1887, Superintendent of Schools, 47 Vernon St., Springfield.

Clarence C. Birchard.
1901, Educational Publisher, 221 Columbus Ave., Boston.

Eugene Bouton, A.B., '75, A.M., '80, Yale; Ph.D., '81, Syracuse Univ.
1894, Superintendent of Schools, 19 Broad St., Pittsfield.

J. E. Burke, A.B., '90, A.M., '93, Colby Univ.
1894, Superintendent of Schools, Lawrence.

Clarence Franklin Carroll, A.B., '81, Yale.
1894, Superintendent of Schools, 765 Main St., Worcester.

Roland W. Guss, Grad., '81, State Nor. Sch., Pa.; A.B., '88, A.M., '91, Wes. Univ., Conn.
1897, Instructor in Natural Science, State Normal School, 405 Church St., North Adams.

Isaac Freeman Hall.
1895, Superintendent of Public Schools, 61 Elmwood Ave., North Adams.

MASSACHUSETTS—*Continued*

1895 Paul Henry Hanus, B.Sc., '78, Univ. of Mich.
1901, Professor of the Theory and Practice of Education, Harvard University, 15 Phillips Pl., Cambridge.
Albert Bushnell Hart, A.B., '80, Harvard; Ph.D., Freiburg, Baden.
1897, Professor of History, Harvard University, 15 Appian Way, Cambridge.
Frank A. Hill, A.B., '62, A.M., '65, Lit.D., '94, Bowdoin.
1894, Secretary of State Board of Education, 70 Mt. Vernon St., Cambridge.
Austin H. Kenerson, A.B., '76, Dartmouth Coll.
Of Ginn & Co., Schoolbooks, 29 Beacon St., Boston.
Alonzo Meserve.
1886, Master of Bowdoin School, 87 Linden St., Allston Station, Boston.
Charles H. Morss, A.B., '80, A.M., '82, Harvard.
1895, Superintendent of Schools, Medford.
James Phinney Munroe, B.Sc., '82, Mass. Inst. of Technology.
Author, 179 Devonshire St., Boston.
Kate S. O'Leary.
1882, Teacher in Public Schools, Bunker Hill St., Charlestown.
Charles W. Parmenter, A.B., '77, A.M., '86, Ph.D., '95, Tufts Coll.
1894, Head Master of Mechanic Arts High School, Boston; res., 80 Upland Road, North Cambridge.
Baroness Rose Posse.
1892, Editor "Posse Gymnasium Journal" and, 1896, Director of Posse Gymnasium, 206 Massachusetts Ave., Boston.
Charles A. Sibley, A.B., '87, Amherst.
Member of Firm of C. A. Sibley & Co., 120 Boylston St., Boston.
John Gilbert Thompson, A.B., '86, A.M., '94, Dartmouth Coll.
1895, Principal of State Normal School, 11 Weymouth St., Fitchburg.
*Alfred Turner, B.Sc., '93, Amherst Coll.
1898, Superintendent of Schools, Prospect St., Turner's Falls.
Henry Whittemore, A.B., '66, Dartmouth Coll.
1898, Principal of State Normal School, State St., Framingham.

1896 Charles H. Ames, A.B., '70, A.M., '73, Amherst Coll.
Educational Publisher with D. C. Heath & Co., 110 Boylston St., Boston; res., 300 Highland St., West Newton.
George Peters Armstrong.
1896, Superintendent of Schools of Belmont and Manchester, 7 Oak St., Belmont.
William C. Bates, A.B., '77, Harvard.
1894, Superintendent of Schools, 182 June St., Fall River.
Wallace C. Boyden, A.B., '83, A.M., '86, Amherst.
1900, Head Master of Boston Normal School; res., 221 Walnut St., Newtonville.
George W. Brown.
1886, Principal of Jackman School, 38 High St., Newburyport.
Elmer Hewitt Capen, D.D., '79, St. Lawrence Univ.; LL.D., '99, Buchtel Coll.
1875, President of Tufts College, 8 Professors' Row, Tufts College.
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1875, Superintendent of City Schools, 37 Atlantic Ave., Fitchburg.
Herbert J. Jones, Ph.B., '94, Cornell Univ.
1900, Superintendent of Schools, Central Worcester District, Holden.
Lincoln Owen, A.B., '89, A.M., '92, Colby Univ.
1893, Master of Rice Training School, 53 Montview St., West Roxbury.
Walter Scott Parker, B.Sc., Dartmouth Coll.
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Master of Everett School, Boston; res., 125 School St., Roxbury.
Dudley A. Sargent, A.B., '75, A.M., '78, S.D., '94, Bowdoin; M.D., '78, Yale.
1880, Director of Hemenway Gymnasium, Harvard University, 27 Everett St., Cambridge.
Elisa A. Sargent.
1900, Editorial Department, The Prang Educational Co., 89 Mt. Vernon St., Boston.
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One of the Publishers of Webster's International Dictionary, 499 Main St., Springfield.
Charles Branch Wilson, A.B., '81, A.M., '84, Colby Univ., Me.
1896, Department of Natural Science, State Normal School, 16 Washington St., Westfield.

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1879, Vice-Principal of State Normal School, 5 Park Ave., Bridgewater.
Jacob H. Carfrey, Ph.B., '92, Ph.M., '95, Syracuse Univ.
1898, Superintendent of City Schools, 72 West St., Northampton.
George H. Conley, A.B., Holy Cross.
Supervisor of Schools and, 1893, Member Mass. State Board of Education, Mason St., Boston.
Gertrude Edmund, Pd.D., '93, New York Univ.
Principal of Normal Training School, 74 Huntington St., Lowell.
William Edwin Hatch, A.B., '75, A.M., '78, Bowdoin.
1888, Superintendent of Schools, 166 William St., New Bedford.
E. A. Kirkpatrick, B.Sc., '87, Ph.M., '89, Iowa St. Coll., Ames.
1897, Psychology and Child Study, State Normal School, 6 Highland Ave., Fitchburg.
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1902, President of Lathrop Publishing Co., 530 Atlantic Ave., Boston.
Thomas E. Thompson.
1805, Superintendent of Schools, Leominster.

*Died December, 1901.

MASSACHUSETTS—*Continued*

1898 **Edward O. Clark.**
1902, Agent for Milton Bradley Co., 180 Berkeley St., Springfield.

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1884, Instructor in Sanitary Chemistry, Massachusetts Institute of Technology, Boston.

1899 **William A. Baldwin**, B.Sc., '97, Harvard.
1897, Principal of State Normal School, Hyannis.

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Principal of State Normal School, 277 E. Merrimac St., Lowell.

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1899, Sturgis-Hooper Professor of Geology, Harvard University, 17 Francis Ave., Cambridge.

Edwin H. Hall, Ph.D., '80, Johns Hopkins Univ.
1895, Professor of Physics, Harvard University, 37 Gorham St., Cambridge.

Charles H. Haskins, A.B., '87, Ph.D., '90, Johns Hopkins Univ.
1892, Professor of History, Harvard University, Cambridge.

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"Kindergarten Review," 51 Acushnet Ave., Springfield.

Louis Philip Nash, A.M., Amherst Coll.
1899, Superintendent of Schools, Morgan St., Holyoke.

J. Asbury Pitman.
1897, Superintendent of Schools, 62 Greenwood St., Marlborough.

William T. Sedgwick, Ph.D., '81, Johns Hopkins Univ.
1883, Professor of Biology, Massachusetts Institute of Technology, and 1897, Curator of The Lowell Institute, Boston.

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Educational Publisher, 219 Columbus Ave., Boston.

Maurice B. Smith, A.B., '95, Amherst Coll.
1901, Sub-Master of High School, Quincy.

Charles F. Warner, A.B., '79, A.M., '82, Colby Coll.
1898, Principal of Mechanic Arts High School, 837 State St., Springfield.

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1900 **Ellor E. Carlisle.**
1898, Associate Professor of Pedagogy, Wellesley College; Hotel Kempton, 237 Berkeley St., Boston.

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1891, Professor of History, Massachusetts Institute of Technology, Boston.

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1869, Principal of the Horace Mann School for the Deaf, 178 Newbury St., Boston.

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1888, Supervisor of Music, Public Schools, 61 Western Ave., Westfield.

1901 **J. W. Armington.**
1893, Principal of Centre School, 15 Hampshire St., Everett.

F. A. Bagnall, A.B., '90, Wesleyan Univ.
1901, Superintendent of Schools, 47 Summer St., Adams.

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1899, Supervisor of Music, Public Schools, 5 Pomeroy Terrace, Northampton.

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1901, Teacher in Public Schools, Quincy; res., 204 Metropolitan Ave., Hyde Park

Stratton D. Brooks, A.B., '96, Univ. of Mich.; Pd.B., '90, Pd.M., '99, Mich. St. Nor. Coll
1902, Supervisor of City Schools, School Committee Building, Mason St., Boston.

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Edward R. Goodwin, A.B., A.M., D.C.L., Bates Coll.
1894, Principal, Classical High School, 22 Boynton St., Worcester.

Edwin Arthur Jones, A.B., '76, Dartmouth Coll.
1890, Supervisor of Schools, 37 Walnut St., Stoughton.

Henry Lefavour, A.B., '83, Ph.D., '86, LL.D., '02, Williams Coll., Mass.
1901, President of Simmons College, 30 Huntington Ave., Boston.

Frank H Palmer, A.B., '75, A.M., '78, Amherst Coll
1900, Managing Editor, "Education," 50 Bromfield St., Boston.

Frank Edson Parlin, A.M., '89, Bates Coll.
1900, Superintendent of Schools, Quincy, Mass.; res., 19 Winthrop Ave., Wollaston.

Alfred L. Saben, A.B., '93, A.M., '96, Dartmouth Coll.
1899, Principal of High School, Manchester.

William H. Snyder, A.M., '88, Harvard Univ.
1890, Master in Science, Worcester Academy, 125 Penn Ave., Worcester.

1902 **Richard Cobb**, A.B., '92, Harvard Univ.
Instructor in English, Harvard University, 16 Quincy St., Cambridge.

H. F. Cutler, A.B., '86, Amherst Coll.
1890, Principal of Schools, Mt. Hermon.

Irving H. Gammell, A.B., '96, Brown Univ.
1900, Superintendent of Schools and Principal of the High School, 255 Dean Ave., Franklin.

Frank M. Gilley, A.B., '80, Harvard Univ.
Instructor in Physics and Chemistry, High School, 100 Clark Ave., Chelsea.

MASSACHUSETTS—*Continued*

1902 Theodore Hough, A.B., '86, Ph.D., '93, Johns Hopkins Univ.

Assistant Professor of Biology, Massachusetts Institute of Technology, Boston.

Augustus H. Kelley, A.M., '75, Colby Univ.

1888, Principal of Lyman School, 57 Montview St., W. R. District, Boston.

Henry Smith Pritchett, Ph.D., Munich; LL.D., Pa. Coll., Harvard, Yale, Johns Hopkins.

President of Massachusetts Institute of Technology, Boston.

Kate Stanley.

1902, Teacher of English, Mechanics Arts High School, 60 Sherman St., Springfield.

Charles E. Stevens, A.B., '86, A M., '89, Bates Coll., Maine.

1894, Superintendent of Schools, Stoneham and Saugus, 9 Cedar Ave., Stoneham.

Thomas Tapper, Fellow Am. Coll. of Musicians, Univ. of the State of N. Y.

Editor, "Musical Record and Review," 162 Boylston St., Boston.

INSTITUTIONS

1895 Harvard College Library.

President, Charles W. Eliot; Librarian, William C. Lane, Cambridge.

1897 Amherst College.

President, George Harris; Librarian, W. I. Fletcher, Amherst.

Boston College.

President, W. G. Read Mullan; Librarian, Thomas I. Gasson. Boston.

Perkins Institution and Massachusetts School for the Blind.

Director, Michael Anagnos, East Broadway, South Boston.

Westfield State Normal School.

Principal, Clarence A. Brodeur, Westfield.

Williams College Library.

President, Henry Hopkins; Librarian, Charles H. Burr, Williamstown.

The City Library Association, Springfield.

Librarian, H. C. Wellman, Springfield.

Free Public Library of the City of Worcester.

Librarian, Samuel Swett Green, Worcester.

Smith College.

President, L. Clark Seelye; Librarian, Miss L. W. Lyon, Northampton.

State Library of Massachusetts.

State Librarian, C. B. Tillinghast, State House, Boston.

State Normal School, Fitchburg.

Principal, John G. Thompson, Fitchburg.

1900 Massachusetts Institute of Technology.

President, Henry S. Pritchett; Secretary, H. W. Tyler, 491 Boylston St., Boston.

Public Library of the City of Boston.

Librarian, James L. Whitney, Copley Sq., Boston.

Public Library, Malden.

Librarian, Miss L. A. Williams, Malden.

Salem Public Library.

Librarian, Gardner M. Jones, Salem.

Somerville Public Library.

Librarian, S. W. Foss, Somerville.

State Normal School, Salem.

Principal, W. P. Beckwith, Salem.

Wellesley College, Library.

President, Miss Caroline Hazard; Librarian, Lydia B. Godfrey, Wellesley.

1901 Adams Public Library.

Librarian, Lucy C. Richmond, Adams.

College of the Holy Cross.

President, Rev. Joseph F. Hanselman, S.J.; Rev Thomas E. Murphy, S.J., Prefect of Studies, Worcester.

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Librarian, C. A. Cutter, Northampton.

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Librarian, George H. Tripp, New Bedford.

North Adams Public Library.

Librarian. Mabel Temple, North Adams.

Public Library of Fitchburg.

Librarian, George E. Nutting, Fitchburg.

Public Library, Lynn

Librarian, J. C. Houghton, Lynn.

1902 Mt. Holyoke College.

President, Miss Mary Emma Woolley; Librarian, Miss B. E .Blakeley, South Hadley.

Taunton Public Library.

Librarian, Joshua E. Crane, Taunton.

MICHIGAN

LIFE DIRECTORS

1895 Hugh A. Graham, A.B., '87, A.M., '92, Albion Coll.; A.B., '90, Univ. of Mich.

1901, Commissioner of Schools, Isabella Co., Mt Pleasant.

Charles G. White, A.B., '80, A.M., '81, Ph.D., '90.

1884, Superintendent of Schools, Lake Linden.

ACTIVE MEMBERS

1884 John A. Stewart, A.B., '75, Univ. of Mich.

1894, Superintendent of Schools, 908 Van Buren St., Bay City.

1887 William Austin Ellis, LL.B., '95, Detroit Coll. of Law; Grad., '83, Mich. State Nor. Coll.

1885, Principal of Duffield Grammar School, 307 Merrick Ave., Detroit.

1889 Lewis Henry Jones.

1902, President of State Normal College, Ypsilanti

MICHIGAN—*Continued*

1889 J. L. Snyder, A.B., '86, Ph.D., '91. Westminster Coll.
1896, President, Michigan State Agricultural College, Agricultural College.
Emory M. Wood, A.M., '82, Ph.D., '93, Allegheny Coll.
1901, Professor of Mathematics and Astronomy, Albion College, 400 E. Erie St., Albion.
1890 Henry Elton Kratz, A.M., '77, Ph.D., '90, Univ. of Wooster, Ohio.
1902, Superintendent of Schools, Calumet.
1892 Myra Jones.
1883, Supervisor of Drawing, 117 Sheldon Ave., Detroit.
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1895, Professor of English Language and Literature, Hope College, 203 W. 12th St., Holland.
Henry R. Pattengill, B.Sc., '74, Univ. of Mich
1896, Editor and Publisher, 420 Townsend St., Lansing.
William Harold Payne, LL.D., '88, Univ. of Mich.; Ph.D., '89, Univ. of Nashville; Litt.D., '96, Western Univ. of Pa.
1901, Professor of Science and Art of Teaching, University of Michigan, 1033 E. University Ave., Ann Arbor
Edwin A. Strong, A.B., '58, A.M., '65, Union Coll.
1885, Professor of Physical Sciences, State Normal College, 127 Normal St., Ypsilanti.
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1901, Student, University of Michigan, 332 S. 5th Ave., Ann Arbor.
1893 S. Emory Whitney.
1885, Principal of Cass School, 209 Hancock Ave. E., Detroit.
1894 E. D. Palmer, A.B., '89, A.M., '92, Hillsdale Coll.; A.M., '97. Univ. of Mich.
1902, Superintendent of Schools, 106 N. Fremont St., West Bay City.
Lew D. Remington.
1902, Student University of Michigan; home address, 1020 Adelaide St., Fenton.
Herbert M. Slauson, Ph.B., '77, Univ. of Mich.
1898, Superintendent of Schools, 433 S. 5th Ave., Ann Arbor.
Durand William Springer, B.Sc., '86, Albion Coll.
1893, Director of Business Department, High School, 857 Tappan St., Ann Arbor.
Edwin C. Thompson, A.M., Pd.M.
1900, Superintendent of Schools, Marquette.
Allen S. Whitney, A.B., '85, Univ. of Mich.
1899, Professor of Pedagogy, University of Michigan, 907 Lincoln Ave., Ann Arbor.
1895 Frederick W. Arbury, A.B., '83, Univ. of Mich.
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Frederick Leroy Bliss, A.B., '77, A.M., '01 (honorary), Univ. of Mich
1899, Principal of Detroit University School, 69 Frederick Ave., Detroit
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1895, Superintendent of Schools, 92 N. McCamly St., Battle Creek.
William Harris Elson, A.B., Univ. of Ind.
1900, Superintendent of City Schools, City Hall, Grand Rapids.
Henry H. Frost, A.B., '85 Univ. of Mich.
1897, Teacher of Geometry, Central High School, 1302 John R St. Detroit
Austin George, A.B., '66, A.M., '69, Kalamazoo Coll.; M.Pd., '93, Mich. State Nor. Sch.
Superintendent of Public Schools, 111 Normal St., Ypsilanti.
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1899, Director of Detroit University School, 185 Joseph Campau St., Detroit.
1896 Lee Earll Amidon, A.B., '92, Mich. Univ.; A.M., '98, Harvard Univ.
1898, Superintendent of Schools, 406 W. Flesheim St., Iron Mountain.
S. Sterrett Beggs, A.B., '88, A.M., '95, N. E. Ohio Nor. Coll.; LL.B., '99, Indianapolis Coll. of Law.
1900, Agent, Werner Schoolbook Co., 207 Lenawee St., Lansing.
W. E. Conkling, Grad. Mich. St. Nor. Coll.
1896, Superintendent of Schools, 304 Cortland St., Dowagiac.
Augustus E. Curtis, A.B., '66, A.M., '70 Union Coll.
Instructor in Latin, 113 W. Maumee St., Adrian.
Edgar E. Ferguson, B.Pd., '96, Mich. State Nor. Coll.; Ph.B., '99, M.Pd.
1805, Superintendent of Schools, 526 Bingham Ave., Sault Ste. Marie.
Samuel B. Laird, M.Sc., '96, McKendree Coll., Ill.
1899, Associate Professor of Psychology, Michigan State Normal College, 318 Forest Ave., Ypsilanti.
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1892, Superintendent of Schools, 208 W. Clay Ave., Muskegon.
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1891, Principal of Amos School, 278, 24th St., Detroit.
W. V. Sage, B.Sc., '84, Mich. Agri. Coll.
1899, Superintendent of Schools, Mt. Pleasant
John Dowling Schiller, A.M. '87, Hillsdale Coll.
Superintendent of Schools, Niles.
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1886, Supervisor of Music in Public Schools, 91 Watson St., Detroit
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Commissioner of Schools, Macomb Co., Romeo.
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1897 Superintendent of Schools, Ironwood.
1897 James H. Beazell, A.B., '88, Univ. of Mich.
1899, Principal of Central High School, 94 Horton Ave., Detroit
H. Z. Brock B.Sc., '85, Univ. of Mich.
Superintendent of Schools, Hancock

MICHIGAN—*Continued*

1897 Francis D. Clarke, C E., Univ. of Mich.
Superintendent of State School for the Deaf, Flint.
Delos Fall, B.Sc., '75, M.Sc., '82, Univ. of Mich., Sc.D., '98, Albion Coll.
1901, State Superintendent of Public Instruction; res., 1101 Michigan Ave., Albion.
C. O. Hoyt, A.M , Albion Coll.
1899, Professor of Science and History of Education, State Normal School, 318 Congress St., Ypsilanti.
Warren C. Hull, Ph.M., '94, Albion; M.Pd., '96, Mich. Nor. Coll.
1901, Superintendent of Michigan School for the Blind, Lansing.
Henry C. Lott, M.Pd., '02, Mich. St. Nor. Coll.
1895, Superintendent of Schools, Elk Rapids.
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1887, Supervisor of Penmanship, City Schools, 879 Brooklyn Ave., Detroit.
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1897, Superintendent of Schools, 50 Miami Ave., Detroit.
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1899, Principal of Alexander Ave. School, 531 Jefferson Ave., Grand Rapids.
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1896, Principal of Central High School, 145 Madison Ave., Grand Rapids.
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1902, Supervisor of Music and Drawing, Public Schools, P. O. Box 404, Houghton.
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1898 James H. Harris, A.B., '91, Univ. of Mich.
1901, Principal of Michigan Military Academy, Orchard Lake.
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1898, Professor of Mathematics State Normal College, 126 N. Washington St., Ypsilanti.
Vernon G. Mays, Ph B., '94, Albion Coll.
1900, Superintendent of Public Schools, Newaygo.
Dimon H. Roberts, A.B., '92, A.M., '95, Amherst Coll.
1900, Superintendent of Training School, Michigan State Normal College, 318 Forest Ave., Ypsilanti.
1899 Joseph B. Estabrook, A.B., '85, A.M , '88, B.Sc , '90, Olivet Coll.
1900, Superintendent of Schools, 41 Grand Ave., Mt. Clemens.
Woodbridge N. Ferris.
1884, President, Ferris Institute, Big Rapids.
W. J. McKone, B.Pd., '01, Mich. St. Nor. Coll.
1898, Superintendent of Public Schools, 1100 E. Porter St., Albion.
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1901, Director Home Department. Detroit University School, 1023 Jefferson Ave., Detroit.
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Superintendent of Schools, 520 N. Warren Ave , Saginaw.
Eugene A. Wilson, M.Pd., '99, Mich. Nor. Coll.
1893, Superintendent of Schools, 153 Washington St., Benton Harbor.
1900 Lewis F. Anderson, A B., '93, A.M., '02, Univ. of Toronto.
Professor of Psychology and Education, Northern State Normal School, 724 Pine St., Marquette.
Oliver G. Frederick.
1901, Assistant Superintendent of Schools, 359 West Boul., Detroit.
Clara W. Mingins.
1896, Supervisor of Kindergartens and Director of Training Department, City Schools, Alberta Flats, Detroit.
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Director of Manual Training, City Schools, 50 Miami Ave., Detroit.
George Stockton Waite.
1899, Superintendent of Manual Training School, 426 S. Rose St., Kalamazoo.
1901 Margaretha Marie Ascher, A.B., '99, Univ. of Mich.
1899, Special Teacher of German, Whiting, Ind.; res., 1001 N. Fayette St., Saginaw, W. S.
F. A. Barbour, A.B., '78, Univ. of Mich.
Professor of English Language and Literature, Michigan State Normal College, 704 Pearl St., Ypsilanti.
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. Supervisor of Music and Drawing, 1003 Main St., St. Joseph.
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1900, Superintendent of Schools, Burr Oak.
R. D. Briggs, Ph.D., '88, Colgate Univ.
1899, Superintendent of Public Schools, 252 Monroe St., Monroe.
Ernest Burnham, Ph.B., '96, A.M., '02, Albion Coll., Mich.
1899, Commissioner of Schools of Calhoun County, So. Kalamazoo Ave., Marshall.

MICHIGAN—*Continued*

1901 E. A. CARPENTER.
Principal of Central Grammar School, 3 Portsmouth Terrace, Grand Rapids.
E. P. CHAPIN, M.E., '93, Cornell Univ.
1900, Principal of Hackley Manual Training School, 95 Jefferson St., Muskegon
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1899, Superintendent of City Schools, 1108 State St., St. Joseph.
P. R. CLEARY.
President of Cleary Business College, Ypsilanti.
E. H COMSTOCK, B.Sc., '97, Univ. of Wis.
1901, Principal of High School, Houghton.
ALBERT P. COOK, A.M., '99.
1902, Secretary of Alma College, Alma.
NEWELL COOK, B.Sc., '94, Albion Coll.
1901, Department of Physics, and Assistant in Chemistry, Albion College, 602 Michigan Ave., Albion.
WEBSTER COOK, A.M., '86, Ph.D., '87, Univ. of Mich.
1899, Principal of High School, 516 Thompson St., Saginaw.
ERMA ETHEL COOPER, A.B., '99, Albion Coll.
1900, Teacher in Public Schools, Little Falls, Minn.; res., Grass Lake.
ELIZABETH COURVILLE.
1895, Principal of Van Dyke School, 1883 Jefferson Ave., Detroit.
EDWARD P. CUMMINGS, Ph B., '93, Univ. of Mich.
1901, Superintendent of City Schools, Grand Haven.
L. O. DAVIS, B.L., '99, Univ. of Mich.
Macomb.
R. B. DEAN, B.Sc., '98, Univ. of Mich.
1899, Superintendent of Schools, 88 Norton Ave., Pontiac.
JOHN P. EVERETT, A.B., '01, Univ. of Mich.
1901, Principal of High School, 42 Florence Ave., Pontiac.
DOROTHY FINCH.
1897, Teacher in Public Schools, 2174 River St., Delray.
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Supervisor of Music, Michigan State Normal College, 407 N. Huron St., Ypsilanti.
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308 Canfield Ave., W., Detroit.
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RALPH S. GARWOOD, A.B., '92, Univ. of Mich.
1901, Superintendent of Public Schools, 214 Mansion St., E. Marshall.
MRS. JOSEPHINE AHNEFELDT-GOSS.
Member of Board of Education, 21 N. Union St., Grand Rapids.
CHARLES T. GRAWN, Pd.M., '97, Mich. St. Nor. Coll.
Principal of Central State Normal School, Mt. Pleasant.
J. S. GRIFFIN, A.M., '76, Eureka Coll., Ill.
Superintendent of Schools, Houghton.
WILLIAM H. C. HALE, Grad. '91, Mich. St. Nor. Coll., Ypsilanti.
County Commissioner of Schools, Cassopolis.
CLARK B. HALL.
1897, Principal of Western High School, 612, 14th Ave., Detroit.
WILLIS E. HANSON, Ph.B., '97, Albion Coll.
1899, Superintendent of Schools, Alma.
SHATTUCK O. HARTWELL, A.B., '88, Amherst Coll.
1901, Superintendent of Schools, 428 S. Burdick St., Kalamazoo.
MERCY JANE HAYES.
1896, Principal of Grammar School, 433 Lincoln Ave., Detroit.
REGENIA R. HELLER.
1901, Head of Department of Theory and Practice, Washington Normal School, 415 Woodward Ave., Detroit.
LENA V. HENDERSON.
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B. SMITH HOPKINS, A.B., '96, A.M., '97, Albion Coll., Mich.
1901, Superintendent of Schools, 1119 Stephenson Ave., Menominee.
KATE A. HOPPER, B. ès L., '94, Univ. of Mich.
1898, Director of a Public School Kindergarten, 657 Cass Ave., Detroit.
OLIVE HOWARD.
1897, Teacher in Eighth Grade, Public Schools, Houghton.
ARTHUR SCOTT HUDSON, A.B., '99 Univ. of Mich.
1901, Superintendent of Schools, Chesaning.
FRED A. JEFFERS.
Superintendent of Schools Atlantic Mine.
G. L. JENNER.
1900, Superintendent of Schools, Midland.
C. D. JENNINGS.
1899, Commissioner of Schools, 811 State St., St. Joseph.
WILLIAM M. JOLLIFFE, B.Sc., '96, Lawrence Univ.
1902, Superintendent of Schools, 604 Elmore St., Escanaba.
FRED L. KEELER, B.Sc., '93, Univ. of Mich.
Department of Science, Central Normal School, Mt. Pleasant.
R. H. KIRTLAND, A.B., '00, Univ. of Mich.
1901, Superintendent of Schools, 305 Court St., E., Flint.
A. J. LADD, A.M., '00, Univ. of Mich.
1898, Professor of Pedagogy, Hope College, Holland.

MICHIGAN—*Continued*

1901 W. Frank Laughlin.
Commissioner of Schools, Lapeer Co., Lapeer.

Eugene La Rowe, A.B., '96, A.M., '98, Univ. of Mich.
Superintendent of Schools, Hancock.

Walter F. Lewis, B.Sc., '95, Univ. of Mich.
Superintendent of Schools, 905 Prospect St., Port Huron.

H. Galen Lull, Grad., Mich. St. Nor.Coll., Ypsilanti.
1898, Superintendent of Schools, Carson City; address for 1902, 126 College Pl., Ypsilanti.

Edward C. McCarthy.
1900, Director of Commercial Dept., Western High School, 123 Pine St., Detroit.

Helen W. McKerrow.
1889, Principal of Tappan School, 140 Leverett St., Detroit.

Albert R. Merriam.
1902, Head of Commercial Dept., Eastern High School, 715 Fourth Ave., Detroit.

George J. Miller.
1901, Superintendent of Schools, Colon.

Mrs. Florence Milner.
1900, In Charge of Secondary Dept., Detroit University School, 661, 2d Ave., Detroit.

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E. C. Nardin, Ph.B., '81, Univ. of Mich.; Pd.B., '90, St. Nor. Coll., Mich.
Superintendent of Indian School, Mt. Pleasant.

J. A. O'Leary.
1897, Superintendent of Schools, Paw Paw.

C. E. Palmerlee.
Ex-Commissioner of Schools, Lapeer.

Linus S. Parmelee, B.Sc., '00, Univ. of Mich.
1901, Instructor in Chemistry and Biology, 212 W. Court St., Flint.

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1898, Department of Physical Science and Mathematics, Eastern High School, 672 Hudson Ave., Detroit.

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1895, Principal of Training School, 303 Jefferson Ave., Saginaw.

Ambrose M. Shotwell.
Book Embosser at School for the Blind, Lansing.

Frank Smith.
1898, Superintendent of Schools, Morenci.

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Elmore B. Sutherland.
Memphis.

George Robert Swain, A.B., '97, Univ. of Mich.
1900, Principal of High School, 1833, 6th St., Bay City.

James H. Thompson.
Member of State Board of Education, Evart.

Templeton P. Twiggs, LL.B., '96, Detroit Coll. of Law.
Head of Commercial Department, Central High School, 517 Lincoln Ave., Detroit.

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1899, Principal of High School, W. S., 623 N. Michigan Ave., Saginaw.

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1900, Superintendent of Public Schools, 113 W. Maumee St., Adrian.

George S. Wright.
Principal of High School, Luther.

1902 Frank Dickinson Haddock, A.B., '00, Olivet Coll., Mich.
1899, Superintendent of Schools, 15 E. 9th St., Holland.

F. G. Heumann.
Member of Board of Education, Traverse City.

Robert D. Shutt.
1893, Industrial Teacher, Indian Department, Capac.

W. D. Sterling, B.L., Univ. of Mich.
1902, Superintendent of City Schools, Lansing.

Clara Wheeler.
1891, Secretary and Treasurer of Grand Rapids Kindergarten Association, 23 Fountain St., Grand Rapids.

INSTITUTIONS

1897 The Public Library of Detroit.
Librarian, H. M. Utley, Detroit.

1898 General Library, University of Michigan.
President, James B. Angell: Librarian, Raymond C. Davis, Ann Arbor.

MICHIGAN—*Continued*

1899 Northern State Normal School.
Principal, Dwight Bryant Waldo, Marquette.
1900 Hillsdale College.
Dean, Charles H. Gurney; Librarian, Miss Jean Martin, Hillsdale.
State Normal College Library, Ypsilanti.
President, L. H. Jones; Librarian, Miss G. M. Walton, Ypsilanti.
1901 Kalamazoo Public Library.
Librarian Miss I. C. Roberts, Kalamazoo.
Michigan State Library
State Librarian, Mrs. Mary C. Spencer, Lansing.
1902 Department of Public Instruction, State of Michigan.
Superintendent, Delos Fall, Lansing.
Michigan Agricultural College Library.
President, J. L. Snyder; Librarian, Mrs. Linda E. Landon, Agricultural Coll.

MINNESOTA

LIFE DIRECTOR

1870 William F. Phelps, A.M., '52, Union Coll., N. Y.
Resident Director, State Normal School, 318 Chamber of Commerce Building Duluth.

ACTIVE MEMBERS

1880 D. L. Kiehle, A.B., '61, A.M., '64, LL.D., '87, Hamilton Coll., N. Y.
2801 Portland Ave., Minneapolis.
1883 Irwin Shepard, A.B., '71, A.M., '74, Ph.D., '93, Olivet Coll., Mich.
1893, Secretary of National Educational Association, 118 W. Wabasha St., Winona.
1886 Frederick E. Stratton, A.B., '71, A.M., '74, Williams Coll., Ph.D., '91, Ill. Wesleyan Univ.
1892, Principal of Academy, Carleton College, Northfield.
1890 Robert Eduard Denfeld, A.B., '76, A.M., '78, Amherst Coll.
1885, Superintendent of Schools, Central High School, Duluth.
1893 Charles M. Jordan, Ph.D., '92, Tufts Coll.
1892, Superintendent of Schools, 615 E. 18th St., Minneapolis.
A. W. Rankin, A.B., '80, Univ. of Minn.
1895, State Inspector of Graded Schools, 916, 5th St., S. E., Minneapolis.
1894 George B. Aiton, A.B., '81, A.M., '87, Univ. of Minn.
1893, State Inspector of High Schools, 1601 University Ave., S. E., Minneapolis.
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1886, Principal of Cleveland High School, 529 Case St., St. Paul.
Isabel Lawrence.
1879, Training Teacher in Normal School, 417, 2d Ave., S., St. Cloud.
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Principal of Webster School, 631 Westminster St., St. Paul.
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1895 John A. Hancock, M.L., '90, Univ. of Wis.; A.M., '93, Stanford Univ.
1901, Director of Training Department, State Normal School, 125 Cherry St., Mankato.
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1900, Ex-superintendent of City Schools, 645 Central Park Pl., St. Paul.
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1898, President of State Normal School, 77 E. Fifth St., Winona.
Samuel J. Race, B.L., Univ. of Pa.
1886, Superintendent of Redwood Co. Schools, Redwood Falls.
Waite A. Shoemaker, Pd.D., '98, N. Y. Univ.
1902, President of State Normal School, 713 1st Ave., S., St. Cloud.
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1870, President of Carleton College, 108 College Ave., Northfield.
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1900, Superintendent of Schools, Blue Earth City.
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1899, President of State Normal School, Moorhead.
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1901, Professor of History, Civics, and Social Science, State Normal School, Mankato.
1896 C. A. Ballard, B.Sc., '94, Univ. of Minn.
1899, Department of Biological Science, State Normal School, Moorhead.
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1872, Assistant Superintendent of Public Schools, 639 St. Anthony Ave., St. Paul.
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1895, Superintendent of Schools, Marshall.
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1898, Agent for Butler, Sheldon & Co., 1025, 3d Ave., S., Minneapolis.
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1875, Superintendent of School for the Blind, Faribault.
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1896 M. Adelaide Holton.
1901, Supervisor of Primary Schools, Hampshire Arms, Minneapolis.

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C. W. Porter.
1896, Principal of Schools, Frazee.
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1899, Principal of Central High School, Hunter's Park, Duluth.
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1900, Physician, White Earth Agency, White Earth.
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Selden F. Smyser, Ph.B., '92, De Pauw Univ.; A.M., 1901, Ohio St. Univ.
1902, Superintendent of Schools, Morris.
Charles M. Stevens.
1902, Superintendent of Schools, Eveleth.
P. C. Tonning, B.Sc., '96, Univ. of Minn.
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MINNESOTA—*Continued*

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Superintendent of Schools, Kasson.
Stella L. Wood.
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1901 **Department of Public Instruction, State of Minnesota.**
Superintendent, J W. Olsen, Capitol, St. Paul.
St. Paul Public Library.
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1892, Chancellor of University of Mississippi, University.
1895 **E. E. Bass**, B.L., '83, Univ. of Missouri.
1884, Superintendent of City Schools, 509 N. Broadway, Greenville.
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1896, Superintendent of Public Schools, 9th St. and 22d Ave., Meridian.
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MISSOURI—*Continued*

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Trenton.

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1901, Substitute Teacher, City Schools, 3655 Cleveland Ave., St. Louis.

Charles M. Gill.
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Mary Edwards Griffin.
1891, Principal of Lowell School, Cordova Hotel, Kansas City.

Willis C. Holman, B.S.D., '97, St. Nor. Sch., Warrensburg, Mo.
1899, Superintendent of Public Schools, Hamilton.

Carl I. Ingerson, B.Sc., '75, Valparaiso Nor. Sch., Ind., LL.B., '80, Cent. Law Sch. of Ind.
1893, Instructor in Physics, Normal and High School, 4906 Fountain Ave., St. Louis.

Edward F. Jackson, A.B., M.E., '81, A.M., '00, Washington Univ., St. Louis, Mo.
1895, Latin Master, Smith Academy, 4400 Morgan St., St. Louis.

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1881, Superintendent of Kemper Military School, Boonville.

Isaac N. Judson, A.B., '73, Yale Univ.
1880, High School, 3124 Locust St., St. Louis.

E. G. Lyle.
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John Henry MacCracken, A.M., '97, New York Univ.; Ph.D., '99, Halle-Wittenberg.
1899, President of Westminster College, Fulton.

Lowell M. McAfee, A.M., '80, Park Coll., Parkville, Mo.
1880, Acting President of Park College, Parkville.

George McA. Miller, A.B., '81, A.M., '84, Western Coll.; LL.B., '89, Univ. of Oregon; Ph.D., '00, Avalon Coll.
1900, President of Ruskin College, Trenton.

John Wilson Million, A.B., '89, A.M., '91, William Jewell Coll. Liberty, Mo.
1897, President of Hardin College, Mexico.

Ophelia A. Parrish.
1889, Supervisor of Practice School, State Normal School, 116 E. Jefferson St., Kirksville.

C. G. Rathman.
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William Schuyler, A.B., '74, A.M., '77, Washington Univ., St. Louis, Mo.
1895 Assistant Principal in High School, 2820 Locust St., St. Louis.

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1899, Instructor in History and Civics, Manual Training High School, 1221 Woodland Ave., Kansas City.

William Wade Walters, B.S.D., '89, St. Nor. Sch., Kirksville, Mo.
1899, Principal of Eliot School, 1357 Union Boul., St. Louis.

J. V. Wettle.
Principal of Clay School, 3222 Harper St., St. Louis.

902 Francis E. Cook, A.M., Williams Coll.
Principal of Wayman Crow School, 3433 Bell Ave., St. Louis.

MISSOURI—*Continued*

1902 R. H. Emberson.
Superintendent of Public Schools, 1503 Hinkson Ave., Columbia.
H. A. Gass.
Editor of "Missouri School Journal," 319 E. High St., Jefferson City.
L. J. Hall.
1899, Assistant State Superintendent of Public Instruction, 416 E. Main St., Jefferson City.
Mrs. M. H. Ludlum.
1891, Instructor in Physical Culture, High School, Grand Ave., St. Louis.
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Agent of American Book Company, 620 W. 4th St., Sedalia.
W. C. Ryan, A B., '95, M.Sc., '98, N I.N.S.
1900, Superintendent of Schools, 300 Winter St., Trenton.
Charles E. Witter, A.B., '97, Northwestern Univ.
1902, Assistant to the Superintendent of Schools, 5205 Page Ave., St. Louis.

INSTITUTIONS

1895 University of Missouri.
President, R. H. Jesse; Secretary, J. G. Babb, Columbia.
1900 St. Louis Public Library.
Librarian and Secretary, F. M. Crunden, 9th and Locust Sts., St. Louis.
Free Public Library, St. Joseph.
President, J. W. Atwill; Librarian, Purd B. Wright, St. Joseph.
Pritchett College.
President, Charles C Hemenway, Glasgow.
1901 St. Louis University, Library.
President, W. Banks Rogers; Librarian, W. Poland, St. Louis.

MONTANA

ACTIVE MEMBERS

1889 Robert G. Young, M.Sc., '77, U. I. Univ.; Ph.M., '00, Cornell Coll.; Pd.D., '02, Mont. Wes. Univ.
1900, Superintendent of City Schools, Butte.
1892 Allen Allensworth, A.M., '84, Roger Williams Univ., Nashville, Tenn.
1902, Superintendent of Post Schools, Ft. Harrison.
Oscar J. Craig, A.M., De Pauw Univ.; Ph.D., Wooster Univ.
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1895 James M. Hamilton, M.Sc., '90 Union Christian Coll.
1889, Superintendent of City Schools, Missoula.
W. H. Johnson, A.M., '90, Univ. of Kansas.
1896, Principal of High School, 731 Stewart St., Helena.
J. A. Koontz, A.B., '01, Leland Stanford, Jr., Univ.
1901, Superintendent of City Schools, 607 Oak St.. Anaconda.
James Reid, A.B , '81, McGill Univ.
1894, President of Montana College of A. and M. Arts, Bozeman.
Cynthia Elizabeth Reiley, B.Sc.
Professor of Mathematics, University of Montana, Box 774, Missoula.
1896 E. A Steere, B.Sc., '81, M.Sc , '95, Univ. of Wis.
1900, Principal of Free County High School Kalispell.
1897 Frank C. Patten.
1892, Librarian, Public Library, Helena.
1898 J. P. Hendricks, B.Sc., '86, A M., '90, Ph.B., Western Univ., Toledo, Ia.
Address for 1902, 5637 Washington Ave., Chicago; home address, 610 W. Mercury St., Butte.
1899 Anna M. Baker, B.L., '98, M L., '99, Univ. of Mich.
1902, Teacher of History, Anaconda.
Miss B. P Downey.
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S. D. Largent.
1898, Superintendent of Schools, Great Falls.
Mary Elizabeth Ryan.
1901, Principal of Webster School, 408 W. Quartz St., Butte.
M. A. Carroll Stapleton, A.B., '85, Middlebury Coll., Vt.
1900, Teacher, High School, P. O. Box 1001, Helena.
1901 William Chandler Bagley, M.Sc., '98, Univ. of Wis.; Ph.D., '00, Cornell Univ.
1902, Professor of Psychology and Pedagogy and Director of Practice, State Normal School, Dillon.
J. M. Lewis.
Deputy Superintendent of Public Instruction, 1035, 12th Ave., Helena.
Kate Shelley.
County Superintendent of Schools, Missoula.
W. W. Welch, A.B., '82, St. Nor. Sch., Tex.
State Superintendent of Public Instruction, Helena.
Adeline R. White, B.L., Univ. of Wis.
1899, Assistant Principal of High School, Hamilton.
1902 William I. Fraser, Pd.B., B.E., Lincoln Nor. Univ.
Principal of Schools, Columbus.
N. R. Leonard, A.B., '58, A.M., '61, Antioch Coll.
President Montana State School of Mines, Butte.
Gertrude E. Man.
Supervisor of Drawing, Great Falls.

MONTANA—*Continued*

1902 **J. G. McKay.**
1902, Superintendent of Schools, Missoula.
Joseph A. Thaler, E.E., Univ. of Minn.
1901, Assistant Professor of Mechanical Engineering, Montana State College, Bozeman.

INSTITUTIONS

1899 **Montana State College of A. and M. Arts.**
President, James Reid, Bozeman.
1900 **Free Public Library, Butte.**
Librarian, J. R. Russel, Butte.
1902 **State Board of Education.**
W. W. Welch, State Superintendent of Public Instruction, Helena.

NEBRASKA

LIFE MEMBER

1880 **Mrs. Grace B. Sudborough.**
1898, Teacher in High School, 549 S. 26th Ave., Omaha.

ACTIVE MEMBERS

1890 **Lizzie L. Banker.**
1900, Principal of Leavenworth School, 802 S. 22d St., Omaha.
1891 **C. G. Pearse.**
1895, Superintendent of Schools, 508 City Hall, Omaha.
1892 **W. K. Fowler.**
1901, State Superintendent of Public Instruction, 1521 S. 22d St., Lincoln.
1894 **D. C. O'Connor**, A.B., '89, A.M., '93, Allegheny Coll., Meadville, Pa.
1897, Superintendent of Schools, 1307 Norfolk Ave., Norfolk.
Anna M. Tibbets.
1892, Principal of Grammar School, 658 S. 17th St., Lincoln.
1895 **Charles Edwin Bessey**, B.Sc., '69, M.Sc., '72, Mich. Agri. Coll.; Ph.D., '79, Univ. of Iowa LL.D., '98, Iowa Coll.
1884, Professor of Botany in the University of Nebraska, 1504 S St., Lincoln.
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1900, President of State Normal School, Peru.
James W. Crabtree, B.Sc.
1897, Inspector of Nebraska High Schools, 1726 Q St., Lincoln.
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1899, Educational Department, Rand, McNally & Co., Lincoln.
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1895, Professor of Education, University of Nebraska, 1433 R St., Lincoln.
A. A. Reed, A.B., Univ. of Neb.
1902, Superintendent of Public Schools, Superior
1896 **Howard Walter Caldwell**, Ph.B., '80, A.M., '94, Univ. of Neb.
1892, Professor of American History and Jurisprudence, University of Nebraska, 511 N. 16th St., Lincoln.
William R. Jackson, A.B., '02, Univ. of Nebr.
1902, Department of Education, Nebraska Wesleyan University, University Place.
A. H. Waterhouse.
1899, Principal of High School, 416 S. 28th St., Omaha.
Harry Kirke Wolfe, A.B., '80, Univ. of Neb.; A.M., Ph.D., '86, Leipzig.
1902, Principal of High School, Box 325, Lincoln.
1897 **Anna Foos.**
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1898 **Allen C. Fling**, A.B., '94, A.M., '98, Univ. of Neb
1898, Superintendent of City Schools, 1102, 1st Ave., Nebraska City.
1899 **E. Benjamin Andrews**, LL.D., '84, Univ. of Neb.; D.D., '84, Colby Univ.
1900, Chancellor, University of Nebraska, Station A, Lincoln.
Robert J. Barr.
1882, Superintendent of City Schools, 1015 W. Division St., Grand Island.
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1893, Professor of Mathematics, University of Nebraska, 1545 C St., Lincoln.
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1893, Professor of Biology and Dean of College of Liberal Arts, Nebraska Wesleyan University, University Place.
John D. French.
1899, Superintendent of Schools, Hastings.
Albert Ross Hill, A.B., '92, Dalhousie Coll., Halifax, N. S.; Ph.D., '95, Cornell Univ.
1897, Professor of Philosophy, University of Nebraska, 505 N. 25th St., Lincoln.
C. W. Turner, A.B., Colby Coll.
State Agent for Silver, Burdett & Co. for Nebraska and Colorado, 1955 A St., Lincoln.
W. H. Wagner, B.L., '88, Univ. of Neb.
1894, Superintendent of City Schools, Hebron.
1900 **Nathan Bernstein**, B.L., '92, M.L., '96, Dartmouth Coll.
1901, Head of Department of Physics, High School, 2622 Capitol Ave., Omaha.
C. H. Gordon, B.Sc., '86, M.Sc., '90, Albion Coll.; Ph.D., '95, Univ. of Chicago.
1899, Superintendent of Schools, 1828 F St., Lincoln.

NEBRASKA—*Continued*

1900 George L. Towne, A.B., '95, Univ. of Neb.
Editor "Nebraska Teacher," 134 N. 11th St., Lincoln.

1901 A. L. Caviness, Ph.B., Ill. Wes. Univ.
Superintendent of City Schools, Fairbury.

Esther A. Clark, A.B., '85, A.M., '90, Nat. Nor. Univ., A.B., '97, Univ. of Neb.
1898, Professor of Latin, Nebraska State Normal School, Peru.

W. H. Gardner, B.Sc.
1899, Superintendent of City Schools, Auburn.

David Bennett Gilbert, B.Sc., '90, A.B., '91, Central Nor. Coll., Danville, Ind.
1902, Associate Business Manager, Fremont Normal College, 13th and Irving Sts., Fremont.

James T. Lees, A.B., '86, A.M., '89, Western Reserve Univ.; Ph.D., '89, Johns Hopkins Univ.
1889, Professor of the Greek Language and Literature, University of Nebraska, 1801 C St., Lincoln.

J. Arnott McLean, Ph.B., '00, Univ. of Chicago.
Superintendent of City Schools, 2105 J and 21st Sts., South Omaha.

W. H. Pillsbury, A.B., Univ. of Neb.
1900, Superintendent of City Schools, Falls City.

Charles C. Root.
1900, Principal of High School, Box 495, Fairbury.

1902 Merle S. Brown, A.B., Doane Coll., Crete, Neb.
1890, Principal of High School, 904, 9th St., Rork.

Irving S. Cutter, B Sc., '98, Univ. of Neb.
1900, State Agent for Ginn & Co., 134 N. 11th St., Lincoln.

C. A. Fulmer, Ph.B., Neb. Wes. Univ.
1898, Superintendent of Schools, Pawnee City.

Matie D. Kelly.
1901, Principal of High School, 726 Hastings Ave., Hastings.

J.W. Searson, A.M., '96, Univ. of Neb.
1899, Superintendent of Schools, Wahoo.

William W. Waters.
1901, Superintendent of Schools, Valley.

INSTITUTIONS

1897 Bellevue College.
President, David R. Kerr; Secretary, Mary Wylie Nicholl, Bellevue.

1898 Omaha Public Library.
President, Lewis S Reed; Librarian, Edith Tobitt, Omaha.

University of Nebraska.
Chancellor, E. Benjamin Andrews; Librarian, J. I. Wyer, Jr., Lincoln.

1901 Department of Public Instruction, State of Nebraska.
Superintendent, William K. Fowler, Capitol, Lincoln.

1902 Nebraska State Normal School.
Principal, W. A. Clark, Peru.

NEVADA

ACTIVE MEMBERS

1895 Walter C. Gayhart, C.E., Ph.D., LL D.
1894, Principal of High School and Public Schools, Austin.

Joseph Edward Stubbs, A.B., '73, A.M., '76, D.D., '90.
1894, President of Nevada State University, Reno.

1899 James C. Doughty.
Tuscarora.

NEW HAMPSHIRE

LIFE MEMBER

1886 James E. Klock.
1900, Principal of State Normal School, Plymouth.

ACTIVE MEMBERS

1899 John Augustus Brown, A B., '79, Harvard.
1886, Member of School Board, and, 1889, Trustee, Robinson Female Seminary, 33 Pine St., Exeter.

1900 Henry C. Morrison, A.B., '95, Dartmouth Coll.
1899, Superintendent of Schools, 52 State St., Portsmouth.

1901 Charles W. Bickford, A.B., '87, Dartmouth Coll.
1900, Superintendent of Schools, 480 Maple St., Manchester.

1902 Ernest L. Silver, B.L., '99, Dartmouth Coll.
1900, Superintendent of Schools, Rochester.

Charles L. Wallace, A.B., '88, Bates Coll.
Principal and Superintendent of Public School, Grafton St., Lisbon.

George H. Whitcher, B.Sc., '81, N. H. Coll. of A. & M. Arts.
1901, Superintendent of Schools of Durham, Newmarket, Alton, and Stratham; res., Durham.

INSTITUTIONS

1898 New Hampshire State Library.
Librarian, Arthur H. Chase, Concord.

1900 Public Library, Dover, N. H.
Librarian, C. H. Garland, Dover.

1902 New Hampshire College of Agriculture and Mechanic Arts, Library.
President, Charles S. Murkland; Librarian, C. W. Scott, Durham.

NEW JERSEY

LIFE DIRECTOR

1892 **James M. Green**, A.M., '84, Dickinson Coll.; Ph.D., '90, Ill. Wesleyan Univ.

1889, Principal of State Normal and Model Schools, Trenton.

LIFE MEMBERS

1876 **Langdon Shook Thompson**, A.M., '84, Marietta Coll., O.; Pd.D., '91, Univ. of the City of New York.

1880, Supervisor of Drawing, Public Schools; 1893, Principal of Metropolitan Normal Art School, 12 Park St., Jersey City.

1884 **Sarah A. Stewart**.

Avon by the Sea.

ACTIVE MEMBERS

1887 **Ebenezer Mackey**, A.B., '78, Mercersburg Coll.

1902, Supervising Principal of City Schools, 314 Hamilton Ave., Trenton.

1889 **A. W. Moon**, A.B., '95, Indiana Univ.

1902, Graduate Student, Teachers' College, Columbia University, New York city; home address, Hardingville.

1890 **Levi Seeley**, A.M., '83, Williams Coll.; Ph.D., '86, Leipzig.

1895, Professor of Pedagogy, State Normal School, 482 W. State St., Trenton.

1891 **Augustus Scarlett**.

1863, Principal of South 8th St. School, 56 S. 11th St., Newark.

1892 **Sarah Y. Ely**.

1887, Supervisor in High and Grammar Departments of State Model School, 52 Carroll St., Trenton.

M. H. Kinsley, B.Sc., '88, St. Lawrence Univ.

1901, Superintendent of Schools, Hudson County, 117 Magnolia Av., Arlington.

Jane M. Lewis

1877, Principal of Primary School No. 8, 99 Mercer St., Jersey City.

S. E. Manness, A.M., '96, Univ. of Tenn.

1900, Principal of Waverley Ave. School, 261 Broad St., Newark.

Henry M. Maxson, A.M., '80, Amherst Coll.

1892, Superintendent of Schools, 661 W. 7th St., Plainfield.

Addison B. Poland, A.M., '76, Wes. Univ., Conn., Ph.D., '90, Univ. of City of N. Y.

1901, Superintendent of Schools, 60 Abington Ave., Newark.

Emily A. Rice, Pd.D., '92, Albany Nor. Coll.

Teacher of Private Classes, 77 Clark Ave., Ocean Grove.

Randall Spaulding, A.B., '70, Yale.

1874, Superintendent of Schools, 14 Clinton Ave., Montclair.

Jotham Walker Wakeman.

1865, Principal of School No. 6, 550 Summit Ave., Jersey City.

H. Brewster Willis.

1886, Superintendent of Schools, Middlesex Co., 185 Livingston Ave., New Brunswick.

1893 **Henry E. Harris**.

1879, Principal of School No. 1, 63 W. 4th St., Bayonne.

Miss S. M. Searle.

1893, Principal of Primary Department, Public School No. 23, cor. Romaine and Pavonia Aves., Jersey City.

George H. Voorhis

1881, Principal of Centennial Grammar School, 311 S. Clinton Ave., Trenton.

Lewis C. Wooley.

1878, Principal of James Wood School, 136 E. Front St., Trenton.

1894 **William N. Barringer**, A.M., Princeton; Pd.D., Univ. of City of N. Y.

1897, Supervisor of Evening and Summer Schools, 1142*a* Broad St., Newark.

Richard Case, A.M., '81, Brown Univ.

1898, Superintendent of Schools, Trenton Ave., Point Pleasant.

Mary J. Donohoe.

1895, Principal of School No. 4, 33 Dodge St., Bayonne.

J. F. D. Heineken

1899, Supervising Principal, Public Schools, East Brunswick Township; res., Milltown.

Gaius Hoffman.

1881, Principal of Schools, Bound Brook.

Will C. Ingalls, A.B., '84, A.M., '87, Brown Univ.

209 Beech St., Arlington.

James Wilmer Kennedy, A.M., '91, New York Univ.

1889, Principal of Miller Street Grammar School, 3 Emmett St., Newark.

Henrietta S. Leslie.

1885, Principal of Public School, Box 26, Blackwood.

N. W. Pease.

1867, Principal of Grammar School No. 2, 31 Morrell St., Elizabeth.

J. Albert Reinhart, A.M., '77 Ph.D., '81, Syracuse Univ.; Ph.B., '76, A.M., '77, Ph.D. '81, Delaware Coll.

1882, Principal of City High School, 534 E. 27th St., Paterson.

Erwin H. Schuyler, A.M., '92, Princeton Coll.

1884, Professor of Mathematics, Dr. Julius Sachs' Collegiate Institute, 38 W. 59th St., New York city; res., Haworth.

Henry Snyder, A.B., '78, A.M., '88, Lafayette Coll.

1892, Superintendent of Public Schools, City Hall, Jersey City.

Margaret I. Wade.

Teacher of Mathematics, High School, 409 First Ave., Asbury Park.

1895 **Wilson Farrand**, A.B., '86, A.M., '89, Princeton.

1901, Head Master of Newark Academy, 544 High St., Newark.

NEW JERSEY—*Continued*

1895 J. M. Rice, M.D., '81, Coll. of Phys. and Sur., N. Y.
Editor of "The Forum," 7 Hillside Ave., Summit.
W. J Shearer, A.B., '87, A.M., '90, Pd.D., '02, Dickinson Coll.
1895, Superintendent of Schools of City of Elizabeth and County of Union, 1100 Anna St., Elizabeth.
1896 Charles J. Baxter.
1896, State Superintendent of Public Instruction. 949 W. State St., Trenton.
Mrs. Lydia A Bennett.
1895, Principal of Leonia Heights Public Schools, Box 103, Leonia, Bergen County.
H. B. Boice, M.D., '88, Univ. Med. Sch., N. Y. City.
1891, State Normal School, Trenton.
Mrs. Millie Ryan Eakins.
609 Belgrove Drive, Arlington.
D H. Farley
Teacher in State Normal and Model School, 515 E. State St., Trenton.
E. R. Johnstone.
1900, Principal of New Jersey Training School for Feeble-Minded, Vineland.
Edwin C. Merrill.
Publisher, Maynard, Merrill & Co, 29–33 E. 19th St., New York; res, 33 Washington St., East Orange.
F. E. Spaulding, A.B., '89, Amherst; Ph.D., '94, Univ. of Leipzig.
1897, Superintendent of City Schools, 230 Pennington Ave., Passaic.
O. I Woodley, M.Pd., '01, Mich. Nor. Coll.; A.B., '01, Albion Coll.; A.M., '02, Columbia Univ.
Principal of Schools, Glen Ridge.
1897 Margaret Bancroft.
Principal of Haddonfield Training School, Main St., Haddonfield.
Miss Jean N. Cox.
1889, Principal of Haddonfield Training School, The Lindens, Haddonfield.
Anna M. Fell, M.E L., Pennington Sem.
1894, Principal of Cadwalader School No. 21, 304 W. State St., Trenton.
E. K. Sexton, Pd.M., '92, New York Univ.
1894, Principal of Central Ave. Grammar School, 103 S. 11th St., Newark.
Ira Winthrop Travell, A.B., '90, Williams Coll.
1893, Principal of High School, Plainfield.
*Thyrza C. Williams.
1896, Associate Principal of Haddonfield Training School. The Lindens, Haddonfield.
1898 S. V. Arrowsmith.
1897, Superintendent of Schools, 103 Maple Ave., Red Bank.
Arthur Grant Balcom.
Principal of Franklin Grammar School, 167 Mt. Prospect Ave., Newark.
Anna Bodler, M.Sc., '95, State Nor. Sch., Mansfield, Pa.; Ph.B., '01, Univ. of Chicago.
1901, Head of Academic Department and Teacher of Pedagogy, Newark Normal and Training School, Newark.
Phoebus W. Lyon, A.M., Princeton.
Principal of West Jersey Academy, Bridgeton.
William M. Swingle, Ph.D.
1898, Superintendent of Schools 114 Cleveland St., Orange.
1899 Mrs. Rachel L. Rogers Dresser, Grad., '91, Kraus Sem. for Kindergartners.
1899, Principal of Training School for Kindergartners, Kindergarten and Connecting Classes, 226 High St., Burlington.
Edward H. Dutcher, A.B., Univ. of Vt.
1891, Principal of Eastern School, 87 N. Munn Ave., East Orange.
J. Howard Hulsart, A.M., '98, Ph.D., '01, Ill. Wes. Univ.
1891, Supervising Principal, 105 Sussex St., Dover.
Jerohn Joseph Savitz, Ph.B., '93, Ill. Wes. Univ.; A.M., '94, Ursinus Univ.; Pd.M., '99, New York Univ.
1901, Superintendent of Public Schools, 41 Ross Place, Westfield.
J. Alfred Wilson, B.Sc. '97, Rutgers Coll.
1901, Principal of Highland Park Public School, 18 Remsen Ave., New Brunswick.
1900 William E. Chancellor, A.B., '89, A.M., '95, Amherst Coll.
1897, Superintendent of Schools, Belleville Ave. cor. Broad St., Bloomfield.
Vernon L Davey, A.B., Cornell Univ.
1890, Superintendent of Schools, 32 Munn Ave., East Orange.
Bertha Elterich.
1895, Instructor of Physical Culture, Haddonfield Training School, Main St., Haddonfield.
James L. Hays.
President, New Jersey State Board of Education, Newark.
1901 Nelson Haas, A.M., Ph.D., Rutgers Coll., N. J.
Principal of High School and Supervising Principal of Schools, Central Ave., Hackensack.
John Coulter Hockenberry, A.B., '99, Ind. Univ.
1900, Superintendent of Schools Haddonfield, and Instructor in Pedagogy, University of Pennsylvania; res., 114 Walnut St., Haddonfield.
Henry C. Krebs.
1897, Supervising Principal of Schools, 73 Doughty Ave., Somerville.
Margaret McCloskey.
1901, General Supervisor of Public Schools, 68 Park Pl., Newark.
John C. McLaury, Pd.B., '95, Pd.M., '97, St. Nor. Coll., Albany, N. Y.; Ph.B., '99, Ph.D., '01, Ill. Wes. Univ.
1900, Principal of Sussex Avenue School, Newark.

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*Died February 4, 1902.

NEW JERSEY—*Continued*

1901 W. Seymour Twichell.
Principal of School No. 6. 479 Ellison St., Paterson.

George A. West.
1885, Principal of Public School, Raritan.

W S. Willis.
1898, Principal of Normal and Training School, 56 Park Pl., Newark.

Mrs. H. Brewster Willis.
185 Livingston Ave., New Brunswick.

1902 Frank W. Bowen.
114 State St., Glassboro.

James E. Bryan, A.B., '90, Johns Hopkins Univ.
1899, Superintendent of Schools, 427 Penn St., Camden.

Daniel T. Steelman.
1900, Supervising Principal of Public School, Glassboro.

INSTITUTIONS

1897 Free Public Library of Jersey City.
President, L. J. Gordon; Librarian, Esther E. Burdick, Jersey City.

State Normal School of New Jersey, Trenton.
Principal, J. M. Green, Trenton.

1901 Free Public Library, Trenton.
President, F. W. Roebling; Librarian, Adam J. Strohm, Trenton.

State Library of New Jersey.
State Librarian, Henry C. Buchanan, Trenton.

NEW MEXICO

ACTIVE MEMBERS

1891 Hiram Hadley, A.M., '85, Earlham Coll.
1898, Professor of History and Philosophy, Coll. of Agri. and Mech. Arts, Las Cruces.

1895 Clarence T. Hagerty, B.Sc., '90, M.Sc., '95, Notre Dame Univ., Ind.
1891, Professor of Mathematics, Coll. of Agriculture and Mechanic Arts, Las Cruces.

Charles E. Hodgin, Grad., '81, Ind. St. Nor. Sch.; B.Pd., '93, Univ. of N. Mex.
1897, Principal of Normal Department, University of New Mexico, Albuquerque.

Charles M. Light, Ph.D., Univ. of City of New York and Nor. Sch. of Kan.
1896, Principal of Normal School of New Mexico, Silver City.

1897 George Benjamin Haggett, B.Sc., '75, Grand River Institute.
1901 Principal Teacher, Indian Schools, Zuni.

Hugh A. Owen, B.Sc.
1900, Instructor in Natural Sciences, Normal School of New Mexico, Silver City.

James Alpheus Wood, A.B., '77, A.M., '80.
1899, Superintendent of Public Schools, Santa Fé.

1899 William H. Decker, B.E., '98, Nor. Sch. of N. Mex.
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1902, Fellow in Education, Teachers College, Columbia University, 408 W. 115th St., New York

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*Died February, 1902

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1896, Supervisor of Grammar Grades, 837 Richmond Ave., Buffalo.

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New York Public Library.
Director, John S. Billings, Astor Library Building, 40 Lafayette Pl., New York.
Port Jervis Free Library.
Librarian, Elizabeth G. Thorne, Port Jervis.
School of Pedagogy, New York University.
Chancellor, Henry M MacCracken; Secretary, Charles Gray Shaw, Washington Sq., E, New York.
State Normal School, New Paltz
Principal, Myron T. Scudder, New Paltz.
Teachers College, Department of Manual Training,
Director, C. R. Richards, New York.
1900 State Normal and Training School, Oswego.
Principal, I. B. Poucher, Oswego.
State Normal School Library, Brockport.
Principal, Charles T. McFarlane; Chairman of Library Committee, Charles D Seely, Brockport.
1901 Brooklyn Public Library.
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Superintendent, Charles R. Skinner, Capitol, Albany.
Pratt Institute Free Library.
Director, Mary W. Plummer, Ryerson St., Brooklyn.
Queens Borough Library.
President, Walter G. Frey; Librarian. Miss J. F. Hume, 101 East Ave., Long Island city.
The University of Rochester.
President, Rush Rhees; Registrar, George B. Huntington Librarian, Charles Hoeing, Rochester.
1902 Canisius College.
Librarian, Francis S Betten, 651 Washington St., Buffalo.
Colgate University Library
President, George E. Merrill; Librarian, D. F. Estes, Hamilton.

NORTH CAROLINA

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1880 Emily M. Coe.
1900, Principal of Normal Training School and Kindergarten, Asheville
1884 Robert Bingham, A.M , '60, LL D , '90, Univ. of N. C.
1873, Superintendent of the Bingham School, Asheville.

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1895 John Jay Blair, B Sc., A.B., '85, Haverford Coll , Pa.
1899, Superintendent of Schools, Wilmington.
1896 Charles D. McIver, A.B , '81, D.L., '93, Univ. of N. C.
President of State Normal and Industrial College, Greensboro.
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1896, President of North Carolina College of Agriculture and Mechanic Arts, West Raleigh.
1898 George H. Crowell, Ph.B., '92, Univ. of N. C.
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1902, State Superintendent of Public Instruction, Raleigh.
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1899 Collier Cobb, A.B., '89, A.M., '94, Harvard; F.G.S.A., '94.
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1900 Charles D Cobb, A.M., Ph B., '95. N. C. Coll.
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1897, County Superintendent of Schools, Jackson.
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1899, Professor of Biology, State Normal and Industrial College, Greensboro.
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1901 Minnie Clayton Johnson.
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President, Charles D. McIver, Greensboro.
1899 Scotia Seminary.
President, Rev. D. J. Satterfield, Concord.
University of North Carolina, Library
President, F. P. Venable; Librarian, Louis R. Wilson, Chapel Hill.
1901 Olivia Raney Library.
Librarian, Jennie H. Coffin, Raleigh.

NORTH DAKOTA

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1891, Superintendent of Schools, Grafton.
Mrs. Helen H. Stockwell, B.L., Univ. of Minn.
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1895 George A. McFarland, B.Sc., '83, M.Sc., '86, Hiram Coll.
1892, Principal of State Normal School, Valley City.
Webster Merrifield, A.B., '77, A.M., '92, Yale.
1891, President of State University of North Dakota, University.
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1896 Mrs. Alice W. Cooley.
1901 Assistant in Department of Pedagogy, University of North Dakota, Grand Forks.
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1897 Anna L. Barnum.
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1898, Superintendent of Schools, Park River.
1898 William R. Kilpatrick.
Wahpeton.
H. W. McArdle, B.Sc., '87, Mich. Agri. Coll.
Professor of Mathematics, North Dakota Agricultural College, Fargo.
1900 George W. Hanna, B.Didac., '94, M.Didac., '99, Highland Park Coll., Iowa.
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1902 M. W. Barnes.
1899, Superintendent of County Schools, Valley City.
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1895, Superintendent of Schools, Larimore.
E. R. Brownson.
1897, Principal of High School, Williston.
Charles Logan Davis.
1898, Superintendent of Indian Schools, Ft. Totten.
Mrs. Mattie M. Davis.
1896, Superintendent of Schools of Cass Co., Fargo.
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A. E. Dunphy.
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1898, Superintendent of Schools of Richland County, Wahpeton.
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1900 State Normal School, Mayville.
President, Joseph Carhart, Mayville.

OHIO

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*Died October 21, 1902.

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1879, Professor of Greek, Ohio University, 110 Union St., Athens.
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1902, Professor of Educational Methods, Normal College, Ohio University, 97 E. State St., Athens.
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1900, Instructor in English, East High School, 150 Hawthorne Ave., Cleveland.
William Henry Scott, A.M., '65, Ohio Univ., LL.D., '84, Ohio Univ. and Ohio Wes. Univ.
1883, Professor of Philosophy, Ohio State University, 131, 15th Ave., Columbus.
Lucia Stickney, A.M., '95, Oberlin Coll.
1900, Teacher in East High School, 840 Franklin Ave., Cleveland.
1894 James Whitford Bashford, A.B., '73, A M., '76, Univ. of Wis.; S.T.B., '76, Ph.D., '81, Boston Univ.; D.D., '90. Northwestern Univ.
1889, President of Ohio Wesleyan University, 23 Oak Hill Ave., Delaware.
J. Remsen Bishop, A.B., '82, Harvard.
Principal of Walnut Hills High School, 2136 Main St., Mt. Auburn, Cincinnati.
W. W. Boyd, A.B., '84, A.M., '86, Marietta Coll.
1902, High School Visitor for Ohio State University, Columbus.
Emma C. Davis.
1893, Supervisor of Public Schools, Rose Building, Cleveland.
Arnold J. Gantvoort.
1894, Director of College of Music, Cincinnati.
Edward L. Harris, A.B., A.M., Ph.B.
1889, Principal of Central High School, 2211 Euclid Ave., Cleveland.
Julia A. Harris.
1873, Teacher in Primary Grade, 4240 Floral Ave., Station H., Cincinnati.
Harriet L. Keeler, A.B., '70, A.M., '00, Oberlin Coll.
1878, Assistant, Central High School, 92 Olive St., Cleveland.
Charles P. Lynch, A.B., '86, A.M., '89, Ph.D., '97, Allegheny Coll.
1902, Assistant Superintendent of Instruction, 99 Windermere St., Cleveland.
William O. Thompson, D.D., '91, Muskingum Coll.,; LL.D., Western Univ. of Pa.
1899, President of Ohio State University, Columbus.
George R. Twiss B.Sc., '85, Ohio State Univ.
1894, Head Science Teacher, Central High School, 56 Mayfield Road, Cleveland.
Anna J. Wright, A.B., '72, Oberlin Coll.
1870, Teacher, High School, 94 State St., Cleveland.
1895 Charles E. Albright.
1899, Principal of Central High School, 449, 5th Ave., W., Columbus.
C. G. Ballou, B.Sc., O. Wes. Univ.
Principal of High School, 2105 Warren St., Toledo.
Charles S. Barrett, B.Sc., '85, Hopedale Coll., O.
1900, Principal of South High School, 78 W. 9th Ave., Columbus.
Mary Blakiston, Ph.B., '93, Ohio St. Univ.
1899, Head of Department of Languages, East High School, "The Normandie," Columbus
Charles E. Carey, Ph.B., Wesleyan Univ.
1897, Superintendent of Public Schools, 306 Park Ave., Warren.
William Wallace Chalmers, A.B., '87, Univ. of Mich.; A.M., '89, Eureka Coll.; B.Pd , '91, Mich. State Nor. Coll.
1898, President of Toledo University, 2220 Maplewood Ave., Toledo.
Stephen Trimble Dial, A.B., '80, A.M., '84, Ohio Wes. Univ.; Ph.D., '94, Syracuse Univ., N. Y.
1890, Superintendent of Schools, 116 Hillside Ave., Lockland.
Clayton L. Dickey.
1893 County School Examiner, Franklin Co., N. Broadway, Clintonville.
George A. Howard.
With American Book Co., Cincinnati.
Herbert T. Kincaid, A.B., '83. Dartmouth Coll.
Classical Department Steele High School, 39 W. McPherson St., Dayton.

OHIO—*Continued*

1895 **Anne H. King**, B.L., '92, Univ. of Cincinnati.
1894, Teacher in Grammar Grade, Linwood School 3675 Heekin Ave., Station C, Cincinnati.

Julia C. Kolbe.
1893, Primary Teacher and Teacher of German in Norwood, 337 Milton St., Cincinnati.

Annie Laws.
President of Cincinnati Kindergarten Association 818 Dayton St., Cincinnati.

S. Herrick Layton, B.Sc., B.L., A.M., Ph.D
1902, Superintendent of Schools, Utica.

William R. Lazenby, B.Agri., Cornell; M.Agri., Iowa Agri. Coll.
1881, Professor of Horticulture and Forestry, Ohio State University, and Secretary, Ohio Medical University, 348 W. 8th Ave., Columbus.

Charles L. Loos, Jr., A.B., '69, A.M., '71, Bethany Coll., W. Va.
1900, Principal of Steele High School, 132 Salem St., Dayton.

S. H. Maharry, A.M., '90, Muskingum Coll., New Concord, O.
1896, Superintendent of Schools, E. Jackson St., Millersburg, Holmes Co.

S. K. Mardis, Ph.B., Pd.B., '93, Ohio Univ., Athens; Pd.D.
1901, Professor of Psychology and Pedagogy in Scio College, Scio.

George C. Maurer, Ph.M. '93, Univ. of Wooster.
1893, Superintendent of Schools, 409 W. Ray St. New Philadelphia.

W. W. McIntire, Ph.B., Ph.M., Univ. of Wooster.
1902, Teacher Norwood High School, Cincinnati; res., 151 Beall Ave., Wooster.

Carrie E. Moores.
1896, Teacher in College, College Hill, Hamilton Co.

Henry M. Parker, A.B., '59, A.M., '65, Marietta Coll., O.
1874, County School Examiner. Elyria.

Edward H. Prichard.
Principal of Fourth Intermediate School, Baymiller, North of Dayton St., Cincinnati.

Robert Edgar Rayman, M.Sc., A.M
1897, Superintendent of Public Instruction, 320 Avondale St., East Liverpool.

William Sherman Robinson, B.Sc., '91, M.Sc., '93, Mt. Union Coll.
1901, Superintendent of City Schools, 327 Perry St., Fostoria.

Horace A. Stokes, A.B., '87, Ohio Wes. Univ.; A.M., '96, Denison Univ.
1897, Superintendent of Schools, 70 Lincoln Ave., Delaware.

Margaret W. Sutherland.
1889, Principal of Normal School, 102 Wilson Ave., Columbus.

Charles F. Thwing, D.D., '88, Chicago Theol. Sem.; LL.D., '94, Ill. Coll. and Marietta Coll.
1890, President of Western Reserve University, 55 Bellflower Ave., Cleveland.

1896 **J. J. Bliss**, A.B., '81, A.M., '86, Oberlin Coll.
1895, Superintendent of Schools, 512 Rensselaer St., Bucyrus.

G. B. Bolenbaugh.
1901, Principal of Fourth District School, 565 Delta Ave., Cincinnati.

Granville Webster Brumbaugh, M.E., '89, Juniata Coll., Pa.
1896, Principal of Seventh District School, 1601 W. 2d St., Dayton.

Marie L. Bruot, B.Oratory.
1889, Teacher of Elocution and Oratory, Central High School, Cleveland.

Howard Champlin.
1892, Superintendent of Writing in Public Schools, Lane Seminary Grounds, Station D, Cincinnati.

Frank B. Dyer, A.B., '79, Ohio Wes. Univ.
1901, Assistant Superintendent of Schools, Cincinnati; and Dean, Ohio State Normal School, Oxford.

August Frederic Foerste, A.M., Ph.D., '90, Harvard Univ.
1893, Teacher of Physics, Steele High School, 1017 Grand Ave., Dayton.

Warren L. Fulton, B.Sc., '95, Ohio Wes. Univ.
1900, Superintendent of Public Schools, Alvordton.

M. A. Henson.
Superintendent of Schools, McArthur.

J. W. Jones, B.Sc., N. Nor. Univ.; B.P., O. Univ., A.M., '02, Gallaudet Coll.
1895, Superintendent of the Ohio Institution for the Deaf, Columbus.

Frederick Alwin King, A.M.
Teacher of Latin and Greek, Hughes High School, 110 Huntington Pl., Mt. Auburn, Cincinnati

Mrs. Frances W. Leiter.
1890, Superintendent of Physical Education. Department of the National W. C. T. U., 220 W. Park Ave., Mansfield.

Anna E. Logan.
Training Teacher, State Normal School, Oxford.

J. V. McMillan.
1902, Superintendent of Schools, Marietta.

George M. Plumer.
Principal of Ward School, 623, 4th St., Marietta.

Samuel Lee Rose.
1895, Superintendent of Public Schools, 219 N. 2d St., Hamilton.

John H. Rowland, A.M.
General Agent, American Book Co., 240 N. Main St., Delaware.

Joseph H. Snyder, B.Sc., '83. Ohio Cent. Coll.; A.M., '94, Heidelberg Coll., O.
1902, Superintendent of Public Schools, Fourth St., Martin's Ferry.

Harriet E. Terrel.
1890, Principal of South Case School, 410 Sibley St., Cleveland.

Charles Liggett Van Cleve, A.B., A.M., O. Wes. Univ., Delaware.
1902, Superintendent of Public Schools, 42 Sturges Ave., Mansfield.

OHIO—*Continued*

1896 **William M. White**, A.B., McNeely Nor. Sch.
1868, Superintendent of Union Schools, Mt. Pleasant, Jefferson Co.

1897 **Ella Bristle**.
1888, Principal of School, 10th District, 31 E. McOwen St., Dayton

Rose Morrison.
1894, Kindergartner and Assistant in City Normal School, 270 Commonwealth Ave , Cleveland.

Mabel L. Pray.
1893. Director of Physical Training, Public Schools, "The Monticello," Toledo.

Rev. Sylvester F. Scovel, A.B., '53, A.M., '56, Hanover.
1883, Professor of Morals and Sociology, University of Wooster, Wooster.

Edward M. Van Cleve, A.B., '86, A.M., '89, Ohio Wes Univ.
1892, Superintendent of City Schools, 124 W. Main St., Greenville.

T. Howard Winters, A B., '96, Ohio Wes. Univ.
1901, Principal of Kingsbury High School, Ironton.

1898 **James M. Carr**, B Sc., '01, Muskingum Coll.
1893, Superintendent of Schools, Frazeysburg.

H. D. Grindle, A.B., '91, Ohio Wes Univ.; A.M., '98, Defiance Coll.
1898, Superintendent of Public Schools, Columbus Grove

L. J. House.
103 Olive Court, Akron.

J. Ross Huffman
1901, Superintendent of Public Schools, Gibsonburg.

Jesse S. Johnson, Ph.B., '92, De Pauw Univ., Greencastle, Ind.
1900, Superintendent of Schools, 57 Lincoln Ave., Salem.

Edmund D. Lyon, A.B., '82, Ohio Wes. Univ.
1901, Superintendent of Schools, Madisonville.

Gillespie K. Lyons.
Agent for American Book Co., 2130 Lawrence Ave., Toledo.

David R. Major, B.Sc., '90, Wabash Coll.; Ph.D., '96, Cornell Univ.
1901, Professor of Education, Ohio State University, Columbus.

Harvey V. Merrick, A.B., '80, A.M , '83, Mt. Union Coll.
1900, Superintendent of The Boys' Industrial School, Lancaster.

James E. Randall.
1892, Superintendent of Schools, Camden.

W. C. Reeder.
1893, Teacher of English and History, Steele High School, 1253 W. 1st St., Dayton.

William E. Roberts.
Supervisor of Manual Training in Public Schools, 464 Rose Building, Cleveland.

F. J. Roller, A.M., '83, Mt. Union Coll.
1888, Superintendent of Public Schools, 34 Main St., Niles.

John M. Sarver, A.M., Ohio Nor. Univ.
1901, Superintendent of Schools, 3136 W. Tuscarawas St., Canton.

Leander William Sheppard.
1898, Teacher in High School, 79 E. 11th Ave., Columbus.

J. F. Smith, A.B., '85, A.M., '90, Kenyon Coll.
1888, Principal of High School, 130 Hancock St , Findlay.

Mary Walter.
Primary Teacher, Public Schools, Pomeroy.

Miss M. A. Woodmansee.
1890, Director of Drawing, City Schools, Hotel Phillips, Dayton.

O. A. Wright, A.B., '01, Western Reserve Univ.
1901, Graduate Student, Western Reserve University, 45 Knox St., Cleveland.

1899 **Howard Ayers**, B.Sc., '83, Harvard; Ph D., '86, Freiburg, Germany; LL.D., '99, Mo. State Univ.
1899, President of University of Cincinnati, 3240 Burnet Ave., Avondale, Cincinnati.

J. A. Beattie, A.M., '76, Bethany Coll.; LL.D.
1902, President of Hiram College, Hiram.

C. L. Cronebaugh, B.Sc., '87, Nat Nor. Univ., Ohio.
1898, Superintendent of Schools, Colonial Building, Cambridge.

Harrison L. Frank, A.M., '79, Otterbein Univ., Ohio
1901, Superintendent of City Schools, 314 S. State St., Marion.

John A. Heizer, B.Sc., '90, Nat. Nor. Univ.
1900, Principal, Hoffman School, 2016 Hudson Ave., Norwood, Cincinnati.

Robert W. Himes.
1895, Superintendent of Schools, Covington.

W. D. Lash, A.M., '74, Ohio Univ.
1878, Superintendent of Schools, Zanesville.

T. B. Pinkerton.
Superintendent of Township High School, Monclova.

E. A F. Porter.
Representative of American Book Co., 317 Walnut St., Cincinnati.

Christian F. Rapp.
Principal of Harrison School, Hotel Princeton, Cincinnati.

Frank M. Shelton, B.Sc., '99, Mt. Union Coll.
1902, Teacher of Mathematics, High School, 2043 Lake St., Canton.

Frank P. Shumaker, M.Sc., '86, A.M., '88, Mt. Union Coll.
1902, State Agent for Ohio, Butler, Sheldon & Co., Educational Publishers, Chagrin Falls.

Wilbur S. Strickland, B.Sc., '87, Nat. Nor. Univ.
1901, Principal of Sherman Public School, 2005 Hudson Ave., Norwood Station, Cincinnati.

OHIO—*Continued*

1899 John W. Swartz, A.B., '96, Ohio Wesleyan Univ.
Superintendent of Schools, Tippecanoe City.

David Stanton Tappan, A.B., '64, Miami Univ.; A.M., '78, Wooster Univ.; D.D. '87, Lenox Coll.; LL.D., '99, Wooster Univ.
1899, President of Miami University, Oxford.

Fannie E. Thomson, Ph.B., '95, Oberlin Coll.
1887, Principal of High School, Medina.

John S. Weaver, A.B., '67, A.M., '70, Wittenberg Coll.
1900, Superintendent of Schools, Springfield.

1900 A. D. Beechy, A.B., '80, Mt. Union Coll.; Ph.D., Wooster Univ.
1891, Superintendent of Schools, 60 S. Linwood St., Norwalk.

La Fayette Bloom.
Principal of 27th District School, 949 Clinton St., Cincinnati.

G. W. Burns, A.B., Bethany Coll., W. Va.; A.M., Farmers' Coll.
1879, Principal, District School No. 18, 4402 N. Hamilton Ave., Cincinnati.

N. H. Chaney, A.B., '80, A.M., '84, Wilmington Coll.; A.M., '92, Ph.D., '93, Ohio Wes. Univ.
1902, Superintendent of City Schools, 341 Lincoln Ave., Youngstown.

J. A. Culler, A.B., '84, Wooster Univ.
1901, Superintendent of Public Schools, 47 East Court St., Bowling Green.

J. P. Cummins.
Principal of 22d District School, Clifton, Cincinnati.

Nettie Fillmore.
1879, Teacher in Woodward High School, 611 Richmond St., Cincinnati.

Franklin Paul Geiger, B.C.S., A.B., '94, Mt. Union Coll.
1902, Superintendent of Schools, 800 Walnut St., Canal Dover.

Albert B. Graham.
Superintendent of Township Schools, 89 Rice St., Springfield.

I. C. Guinther, B.Sc., '90, A M., '00, N. W. O. U.
Superintendent of Public Schools, 323 W. Main St., Galion.

J. M. Hamilton, A.B., '93, Nat. Nor. Univ., Lebanon, Ohio.
1899, Superintendent of Public Schools, Lebanon.

H. V. Hotchkiss, Ph.D., Allegheny Coll.
1900, Superintendent of Schools, 562 E. Buchtel Ave., Akron.

W. F. Hughes.
Superintendent of Covedale School, Station F, Cincinnati

S. P. Humphrey, B.Sc., '95, Rio Grande Coll., Ohio.
1897, Superintendent of Public Schools, 222 Park Ave., Ironton.

Norman Edward Hutchinson.
1900, Superintendent of Schools, Bryan.

A. B. Johnson, A.M., '53, Oberlin Coll.
1854, Ex-Superintendent of Avondale Schools, 524 Forest Ave., Station I., Avondale, Cincinnati. Resigned after forty-eight years of consecutive service.

Lura B. Kean, Ph.B., '89, Univ. of Wooster.
1897, Principal of High School, 153 N. Buckeye St., Wooster.

Lee R. Knight.
1889, Principal of Perkins Normal School, 210 Kent St., Akron

Allen Norman Krieg, B.Sc., A.M.
1900, Superintendent of Arcadia and Washington Township Schools, Arcadia.

Charles A Krout, A.B., '87, A.M., '90, Wittenberg Coll.
1900, Superintendent of Schools, 121 Sycamore St., Tiffin.

Herbert R. McVay, Ph.B., '90, Ohio Univ.
1902, Superintendent of Schools, Sidney.

William Henry Meck, A.B., '94, Ohio Wes. Univ.; A.M., '98, Miami Univ.
1895, Teacher of History, Civics, and Mathematics in Steele High School, and (1898) Member State Board of School Examiners, 231 W. 4th St., Dayton.

R. W. Mitchell.
Superintendent of Public Schools, 814 Clinton St., Defiance.

John Evans Morris, B.Sc., '84, M.Sc., '87, Mount Union Coll.
1892, Superintendent of Public Schools, 208 E. Oxford St., Alliance.

H.W. Mumma.
Superintendent and Principal of High School, of Randolph Township Schools, Englewood.

Alfred Tyler Perry, A.B., '89, A.M., '91, D.D., '01, Williams Coll.
1900, President of Marietta College, 210 5th St., Marietta.

Arthur Powell, A.B., '80, A.M., '85, Oberlin Coll.
1901, Superintendent of Schools, 421 N. 7th St., Steubenville.

Edward D. Roberts, A.B., '99, Univ. of Cincinnati.
1901, First English Assistant, Whittier School, 1620 Dudley St., Cincinnati.

Ella A. Rothe.
Teacher in Third Intermediate School, 2351 W. McMicken Ave., Cincinnati.

Albert Hugh Sherer, A.B., '99, Ind. Univ.
1901, Superintendent of Public Schools, Oxford.

William McKendree Vance, A.B., '83, A.M., '86, Ohio Wes. Univ.
1891, Superintendent of Public Schools, Miamisburg.

O. Perry Voorhes, B.Sc., '79, N. Nor. Univ.
1901, Principal of Oyler School, Cincinnati.

William Campbell Warfield.
With Rand, McNally & Co., Box 654, Cincinnati.

Arthur H. Wicks, A.B., '95, Baldwin Univ., Berea, Ohio.
1900, Superintendent of Schools, 708 Cherry St., Clyde.

E. W. Wilkinson.
1900, Principal of First Intermediate School, 3661 Russell Ave., Cincinnati.

Homer B. Williams, A.B., '91, A.M., '94, O. N. Univ.
1898, Superintendent of Schools, 129 Central Ave., Sandusky.

OHIO—*Continued*

1901 Walter H. Aiken.
Superintendent of Music, Public Schools, Station K Cincinnati.

Peter D. Amstutz.
1898, Superintendent of Riley Township Schools and High School, Pandora.

F. E. Assenheimer, A.B., '95, Capitol Univ., Ohio.
1902, Principal of Normal Department, Lima College, Lima.

J. K. Baxter, A.M., '93, Hiram Coll.
1898, Superintendent of Schools, 107 W. Hamtramck St., Mt. Vernon.

Thomas H. Bell.
Director of Schools, 176 Cleveland St., Cleveland.

Alice L. Betts.
1898, Walnut Hills High School, 1762 E. McMillan St., Cincinnati.

W. H. Block B.Sc., Pd.B.
1901, Superintendent of Schools. Huron.

T. W. Bookmyer, B.Sc., '80, Nat. Nor. Univ., Lebanon, Ohio.
Principal of Business College, 432 Jackson St., Sandusky.

Charles J. Brooks.
1902, Principal of Avondale School, 1530 Westminster Ave., Cincinnati.

Edwin N. Brown, A.M., '84, LL.B., '87, Ph.D., '02, Univ. of Mich.
1902, Superintendent of City Schools, Dayton.

R. A. Brown, A.B., '95, Marietta Coll., Ohio.
Superintendent of Schools, Cedarville.

Forrest Baker Bryant, A.B., '99, Otterbein Univ., Westerville, Ohio
1902, Superintendent of Schools, Richwood.

James William Carnahan, A.B., '96, Ky. State Univ.
1901, Professor of Natural Science and Latin, Berea College, Berea, Ky.; res., 117, 10th St., Toledo.

Edward P. Childs. B Sc., '94, Denison Univ., Granville, Ohio.
1901, Principal of High School, 242 Granville St., Newark.

Thomas C. Coates.
Principal of High School, Lancaster.

Helen Hutchinson Cowing, B.L., '92, Western Reserve Univ., Cleveland, Ohio.
1902, Teacher in West High School, 840 Franklin Ave., Cleveland.

F. E. Crane.
Principal of Columbian School. 3000 Vine St., Cincinnati.

Warren Darst, A.B, '74, A.M., '83, Nat. Nor. Univ., Ohio.
1902, Lecturer on Pedagogy and English, State Normal School, Oxford, Ohio; home address, Warsaw, Ind.

Frederick William Dearness.
1901, Principal of 12th District School, 2654 Harrison Ave., Cincinnati.

Charles F. Dutton, Jr., A.B., '93, Oberlin Coll.
1894, Teacher of Science, West High School, 64 W. Roy Ave., Cleveland.

Frank R. Ellis.
With American Book Co,. 317 Walnut St., Cincinnati.

C. M. Erkenberry.
Superintendent of Monroe Township Schools, West Manchester.

Elizabeth G. Evans, A.B., '97, Wellesley Coll.
1897. Instructor in English, Steele High School, 570 W. 2d St., Dayton.

Charles S. Fay.
Superintendent of Schools, Reiley Ave., Wyoming.

J. R. Fortney.
Representing American Book Co., 317 Walnut St., Cincinnati.

J. M. H. Frederick, A.B., '86, Amherst Coll.
1895, Superintendent of Schools, 62 Elmwood Ave., Lakewood.

Wells L. Griswold, Ph.B., '94. Oberlin Coll.
1901, Principal of Royen School, 22 West Wood St., Youngstown.

Miron Elisha Hard, A.M., Ohio Wes Univ.
Superintendent of Public Instruction and Clerk of State Board of School Examiners, 150 Caldwell St., Chillicothe.

B. B. Harlan, B.Sc., '76.
1804, Teacher of Mathematics, High School, 39 Babbitt St., Dayton.

Henry Harrison Helter, A.B., '91, O. Wes. Univ.
1899, Superintendent of Schools, W. Anglaize St., Wapakoneta

Ashley J. Huffman, A.B, Wooster Univ., Ohio.
1899, Superintendent of Schools, Attica.

Anna P. Johnson.
Teacher in Sixth Grade, Public Schools, Toledo; res., W. Front St., Perrysburg.

I. N. Keyser, Ph.B., '90, Baldwin Univ.
1901, Superintendent of Public Schools, 314 Lafayette Ave., Urbana.

J. E. Kinnison, A M.
1881, Superintendent of Schools, Jackson.

W. H. Kirk, A.B., '87, A.M., '90, Baldwin Univ., Berea, Ohio.
1891, Superintendent of Schools, 28 Grassmere St, East Cleveland.

Joseph Krug.
1872, Teacher of German, Central High and Normal School, 51, 4th Ave., Cleveland.

John P. Kuhn.
Principal of Normal School, Box 1311, New Philadelphia.

Henry S. Lehr, A.M., '74, Mt. Union Coll.; Ph.D., Wooster Univ., Ohio.
1871, President of Ohio Normal University, 71 Gilbert St., Ada.

William McClain, Jr., A.B., '93, A.M., '95, Ohio Wes. Univ
1901, Superintendent of Schools, E. High St, London.

J. E. McGilvrey, A.B., '95, Ind. Univ.
1898, Principal, Cleveland Normal School, 41 Hayward St., Cleveland.

J. E. McKean, A.M.
1900, Superintendent of Schools, 87 S. Main St., Middletown

OHIO—*Continued*

1901 Henry C. Muckley.
1902, First Assistant Superintendent of Schools, 148 Hawthorne Ave., Cleveland.
J. C. Oldt, A.B., '90, A.M., '93.
1890, Superintendent of Public Schools, Put in Bay
Cordelia L. O'Neill.
Assistant Principal of Brownell School, 163 Wade Ave., Cleveland.
F. B. Pearson, A.M., '88, Wooster Univ., Ohio.
Principal of East High School, 125 Wilson Ave., Columbus.
John William Perrin, A.M., '89, Wabash Coll.; Ph.D., '95, Univ. of Chicago.
1899, Professor of History, Western Reserve University, Cleveland.
Thomas P. Pierce.
Superintendent of Schools, Harrison.
Jennie Warren Prentiss.
1896, Director of Laurel Institute, 2165 Euclid Ave., Cleveland.
Ada Marcy Ritchie.
1880, First Assistant in High School, 2138 Robinwood Ave., Toledo
Alan Sanders.
Instructor of Mathematics, Hughes High School, 2918 Montana Ave., Cincinnati.
Harry L. Senger, A.B., '98, Univ. of Cincinnati.
First Assistant in 19th District School, 116 E. Macmillan St., Cincinnati.
John B. Shotwell.
Author of History of Schools in Cincinnati, 502 Main St., Cincinnati.
Oscar M. Soule.
1900, Superintendent of Schools, 9 Lake Ave., Franklin.
C. E. Stevens.
1900. Teacher in Commercial Dept., So High School. 253 Commonwealth Ave., E. Cleveland.
J. L. Trisler, Ph.D., Heidelberg Univ., Tiffin, Ohio.
Superintendent of Schools, Hartwell.
Lucy B. Tucker
1901, Teacher in 8th Grade, Ohio Avenue School, 181 W. 10th Ave., Columbus.
F. D. Ward, M.Sc., N. W. Ohio Nor. Univ.
1890, Superintendent of Public Schools, 922 E. Erie Ave., Lorain.
G. A. B. Wyly.
1901, Principal of High School, 203 W. Ray St., New Philadelphia.
John A. Wright, B.Sc, '01, Valparaiso Coll.
Superintendent of Schools and County School Examiner, Liberty Center.
Lewis Edwin York, B.Sc., '94, Ph.B., '02, Mt. Union Coll., Alliance, O.
1902, Superintendent of Public Schools, Lock Box 79, Barnesville.
J. W. Zeller, Ph.M., Mt. Union Coll., Ohio; Ph.D., Findlay Coll.
1877, Superintendent of Public Schools. 311 E. Lincoln St., Findlay.
1902 M. F. Andrew.
1902, Assistant Superintendent of Schools, City Hall, Cincinnati.
C. B. Austin, A.M., '81, Ohio Wes. Univ.
1884, Professor of Mathematics, Ohio Wesleyan University, Monnett Hall, Delaware.
John M. Bardan, A.B., Ph.D., Yale Univ.
Virginia St., Toledo.
Guy Potter Benton, A M, DD.., Baker Univ.
President of Miami University, Oxford.
H. H. Cully.
1895, Superintendent of Schools, 318 Doan St, Glenville.
A. W. Drushel, B Sc., '96, A.B, '97, Nat. Nor. Univ.
Principal of High School, Lebanon.
Elizabeth K. Fairweather.
Teacher of French and English, Norwood High School, 820 Locust St., Norwood, Cincinnati.
Minerva G. Harris.
1886, Teacher in Primary Department, Public School, Finneytown; **address**, R.F.D. No. 2, Mt. Healthy.
George W. Knight, A.B., '78, A.M., '83, Ph.D., '84, Univ. of Mich.
1885, Professor of American History and Political Science, Ohio State University, 169 W. 11th Ave., Columbus.
Ross Masters, Ph.B., '92, Ph.M., '96, Scio Coll., Scio, Ohio.
1902, Principal of High School. 315 Race St., Canal Dover.
Margaret A. O'Connor.
Principal of Graded School, 86 Mecca St., Gleveland.
May H. Prentice.
1899, Instructor in City Normal Training School, 126 Courtland St., Cleveland.
Mary A. Venable.
1885, Teacher in Primary Grade, Lakewood Schools, 175 Archwood Ave., Cleveland.
Lake G. Watson, Ph.B., '00, Earlham Coll.; A.M., '02, Columbia Univ.
1902, Supervisor of Primary Schools, 600 W. 5th St., Canton.

INSTITUTIONS

1895 Miami University.
President, David Stanton Tappan; Librarian, Rev. Wm. J. McSmely, Oxford.
1897 Cleveland Public Library
Librarian, William H. Brett, Cleveland.
Ohio State University.
President, William O Thompson; Librarian, Olive Jones, Columbus.
1898 Normal School, Dayton.
Principal, Grace A. Greene, Dayton.

OHIO—*Continued*

1899 The Western College for Women.
President, Leila S. McKee; Librarian, Eliza Lamb, Oxford.
1900 Denison University, Library.
Librarian, H. H. Tuttle, Granville.

OKLAHOMA

LIFE MEMBER

1886 G. I. Harvey.
1901, Superintendent of Pawnee Training School, and Special United States Disbursing Agent, Pawnee.

ACTIVE MEMBERS

1892 David R. Boyd, A.B., '78, A.M., '81, Univ. of Wooster; Ph D., '00.
1892, President of University of Oklahoma, Norman.
1895 H. Edgar Thompson, B.Sc., '88, So. Nor. Sch., Bowling Green, Ky.
Ralston.
1900 Elmira R. Greason.
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1889, Superintendent of Indian School, Chilocco.
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President, George W. Atherton, State College.
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1899 Harris Institute Library.
Librarian, Miss Ama Howard Ward, Woonsocket.
1901 Brown University.
President, W. H. P. Faunce; Librarian, H. L. Koopman, Providence.

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1891 Martha Schofield.
1868, Founder and General Manager of Schofield Normal and Industrial School for Colored Youth, Aiken.

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1895, Superintendent of Schools, Columbia.
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1893, Superintendent of City Schools, Chester.
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Ida P. Hatch.
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G. L. Pigg, A.B., '73, Berea Coll., Ky.
Superintendent of W. S. Indian School, Crow Creek.

1900 **C. W. Martindale**, A.M., '86, Drake Univ.
1899. Superintendent of Schools, 410 Capitol St., Yankton.

1901 **Mina H. Aasved.**
Principal of School, Bristol.

William H. Barten.
1893, Teacher in Day School No. 21, Pine Ridge Agency, Allen.

John F. Carson.
1891, Teacher in Day School, Cheyenne River Agency, Leslie.

Claudie C. Covey.
Principal Teacher Oglala Boarding School, Pine Ridge Agency, Pine Ridge.

Augusta S. Hultman.
1900, Superintendent of Grace Indian School, Crow Creek.

Sivert A. Jordahl, B.L., '98, Univ. of Minn.
Teacher in Lutheran Normal School, Sioux Falls.

Charles F. Koehler, Ph.B., '90, A.M., '93, Univ. of Wooster, O.
President of State Normal and Industrial School, Aberdeen.

Mrs. Nellie B. McClelland, B.Sc., '90, Amity Coll., College Springs, Ia.
1898, Teacher in First Primary, Public Schools, Sturgis.

J. A. McLouth, Ph.B., '92, Hillsdale Coll., Mich.
1901, Superintendent of Schools, Bon Homme County, Springfield.

George Williston Nash, B.Sc., '91, M.Sc., '95, Yankton Coll., S. D.
1902, State Superintendent Elect for South Dakota, Canton.

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1891, Superintendent of Oglala Boarding School, Pine Ridge.

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1885, Principal of All Saints School, Sioux Falls.

Rilla A. Pettis.
1900, Teacher in Indian School, Rapid City.

G. J. Schellenger.
Deputy State Superintendent of Public Instruction, Pierre.

Edward C. Scovel.
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Miss E. O. Stilwell.
Matron, Indian School, Rapid City.

Emma L Truman.
1898, Housekeeper, No. 29 Day School, Pine Ridge Agency, Kyle.

1902 **D. H. Brewster.**
Superintendent of Schools of Sanborn County, Woonsocket.

E. O. Garrett.
Agent of American Book Co., Mitchell.

Rollin Spencer Gleason.
1895, Agent of American Book Co., Hotel Aberdeen Aberdeen.

Erwin S. Hatch, B.Sc., '99.
Principal of Public Schools, Dell Rapids.

J. M. Hunter.
1899, Principal of Schools, Groton.

Carl J. Mohn.
Teacher in Public Schools, Britton.

E. D. Mossman.
Superintendent of Cheyenne River Indian Boarding School, Cheyenne Agency.

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1897, Superintendent of Grand River Boarding School, Little Eagle.

B. C. Pederson.
Teacher in the Moore Township Schools. Charles Mix Co , Geddes.

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Principal of Village School, Letcher.

A. M. Steyer, B.Sc., '97, Nor. Ind. Nor. Sch.
Superintendent of County Schools, Castlewood.

Mrs. J. E. Taplin
Teacher in Intermediate Grade, Public Schools, White.

John B. Tripp.
1900, Superintendent of Rosebud Boarding School, Rosebud.

Maude Louise Van Wagenen.
1900, Kindergartner, Rosebud Boarding School, Rosebud Agency.

C. M. Young, Ph.M.. Ph.D., Hiram Coll.
Professor of History and Social Science, University of South Dakota, Vermilion.

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1895, Professor of American History, and (1899) Dean of Peabody Normal College, 813 S. Summer St., Nashville.

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1885, Principal of Girls' High School, 508 Broad St., Knoxville.

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1893, Superintendent of City Schools, 1001 E. 9th St., Chattanooga.

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1898, Professor of Literature, Vanderbilt University, Nashville.

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1886, Principal of Howard High School, 207 Grove St., Chattanooga.

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Agent for American Book Co., Broad and Spruce Sts., Nashville.

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1893, Professor of Pedagogy, University of Tennessee, Chief of Bureau of Southern Education Board, and (1901) Editor of Atlantic Educational Journal, Knoxville.

1899 Charles William Dabney, Ph.D., Göttingen; LL.D., '01, Yale Univ.; and '02, Johns Hopkins Univ.
1887, President of University of Tennessee, Knoxville.

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1900, Superintendent of City Schools, 1816 West End Ave., Nashville.

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1900, Supervisor of Manual Training, 505 Russell Ave., Nashville.

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George W. Gordon, B.Sc., '59, Univ. of Nashville, Tenn.
1892, Superintendent of City Schools, 280, 2d St., Memphis.

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1900, Supervisor of Manual Training, City Schools, Nashville.

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1885, County Superintendent and Principal of Avenue L School, 3202 Avenue N, Galveston.
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1895, Superintendent of Schools, Austin.
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1897, Professor of Pedagogy, University of Texas, 112 W. 18th St., Austin.
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1893. Superintendent of City Schools, High School, Dallas.
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1900, Southern Manager, Maynard, Merrill & Co., 330 Junius St., Dallas.
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1899, President of University of Texas, 1914 Nueces St., Austin.
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1897, Superintendent of Public Schools, Utah Co., Pleasant Grove.
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1896, Instructor in Biology, High School, Salt Lake City.
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1900, Superintendent of Schools, Ogden.
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1902, Director of School of Commerce, Agricultural College of Utah, Logan.
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1901, Superintendent of City Schools, 77 Peach St., Salt Lake City.
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1900, Principal of High School, University Club, Salt Lake City.
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1897, Director of Kindergarten Department, State Normal School, Salt Lake City.
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1898, Superintendent of County Schools, Ogden.
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1899, President of Latter Day Saints' University, 554 S. 8th St., Salt Lake City.
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1900, Superintendent of Education of State of Vermont, State House, Montpelier.
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1898, Principal of Edmunds High School, 305 Main St., Burlington.
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1900, Assistant in High School, Brown Ave., St. Albans.
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1877, Principal of Troy Conference Academy, Poultney.
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1897, Principal of State Normal School, Castleton.
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1889, Superintendent of Schools, City Hall, Richmond.
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1893, Superintendent of Schools, 622 Madison St., Lynchburg.
1896 ALBERT H. TUTTLE, B.Sc., '68, State Coll. of Pa.
1888, Professor of Biology, University of Virginia, 1 West Lawn, Charlottesville; temporary address, Evanston Inn, Pasadena, Cal.
1897 CELESTIA S. PARRISH, Ph.B., '96, Cornell Univ.
1893, Professor of Philosophy in Randolph Macon Woman's College, Lynchburg.

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1899, Principal of Fairfax College, 109 Stewart St., Winchester.

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1886, Superintendent of Schools of Frederick Co. and of City of Winchester, 12 Rouss Ave., Winchester.

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1899, President, Hoge Memorial Military Academy, Blackstone.

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1901, Principal of The Virginia High School, Suffolk.

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1893, Principal, Hampton Normal and Agricultural Institute, Box 10, Hampton.

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1892, Editor of "Virginia School Journal," Richmond.

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Supervisor of City Schools, Newport News.

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1900, Psychology and Pedagogy, State Normal School, Cheney.

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1896, Ex-Superintendent of City Schools, 616 Tacoma Ave., Tacoma.

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1894, Professor of German, and (1898) Dean of College of Liberal Arts, University of Washington, 4311, 10th Ave., N. E., Seattle.

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1899, Superintendent of City Schools, 527 S. Howard St., Spokane.

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1900, Editor of "Journal of Childhood and Adolescence," and (1901) Professor of Pedagogy, University of Washington, Seattle.

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1899, Instructor in Mathematics in High School, Everett.

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1901, Superintendent of City Schools, Dayton.

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1895, Principal of Bryant School, 704 S. I St., Tacoma.

1899 F. F. AVERY.
1890, Superintendent, Ft. Spokane Indian Boarding School, Miles.

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1893, Vice-Principal of State Normal School, Ellensburg.

ERNEST RISTE.
1902, Superintendent of City Schools, Wenatchee.

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1900, Principal of Ross School, 1136, 10th Ave., Seattle.

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1901, Principal of Training School, State Normal School, Ellensburg.

1901 W. E. ALLEN, B.L., '98, Earlham Coll., Richmond, Ind.
1900, Teacher of Botany, High School, care of Y. M. C. A., Spokane.

IDA AGNES BAKER, B.Sc., '78, A.M., '82, Central Univ., Pella, Ia.
1899, Instructor in Mathematics and Grammar, State Normal School, 726 High St., Whatcom.

WASHINGTON—*Continued*

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1898, Superintendent of Schools of Skagit Co., Mt. Vernon.

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1900, Superintendent of City Schools, 3012 Oakes Ave., Everett.

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1901, Superintendent of Schools, Snohomish.

C. N. Young.
1891, Principal of Ward School, 812 N. L St., Tacoma.

1902 W. T. Bailey, B.L., Puget Sound Univ.
Principal of Sheridan School, 4608 S. J St., Tacoma.

W. T. Campbell.
1897, Principal of Schools, West Seattle.

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1901, Critic Teacher in Grammar Department, State Normal School, 724 Garden St., Whatcom.

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1902, Principal of Schools at Highland, E. 1820 Fourth Ave., Spokane.

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1898, Teacher in Public Schools, 1515 Summit Ave., Seattle.

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1900, Indian School Farmer, Miles.

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1900, Principal of the Annie Wright Seminary, Tacoma.

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1897, Principal of Salmon Bay School, 1418 Perry Ave., Seattle.

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1892, Principal of High School, 935, 16th Ave., Seattle.

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1892 Professor of English Language, West Virginia Colored Institute, Institute.

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1901, Associate Professor of Education, West Virginia University, Morgantown.

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1897, Principal of High School, 70 S. Penn St., Wheeling.

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1899, Superintendent of Schools, 317 Wells St., Sistersville.

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Department of Mathematics, Salem College, Salem.

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Emeritus Jackson Professor of Law, University of Wisconsin, 315 Wisconsin Ave., Madison.

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1892, Professor of Mathematics, State Normal School, River Falls.

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601 Pine St., Platteville.

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1899, State Normal School Regent, R.F.D., No. 41, Edgerton.

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1898, State Superintendent of Public Instruction, Capitol; res., 217 S. Hamilton St., Madison.

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1901, Superintendent of Wisconsin School for the Blind, Janesville.

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1893, Superintendent of Schools of Grant County, 212 N. Adams St., Lancaster.

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1899, State Inspector of School for the Deaf, 133 E. Gorham St., Madison.

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1885, Vice-President, and (1893) Professor of Constitutional and International Law, University of Wisconsin, 803 State St., Madison.

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Lawyer, Crandon, Forest Co.

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1863, Founder and President of Spencerian Business College, Wisconsin St. and Broadway, Milwaukee.

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1888, Professor of Philosophy and Pedagogy, and, 1897, Director of School of Education, Univ. of Wis., 512 Wisconsin Ave., Madison.

Isaac Newton Stewart, B.Sc., '62, Univ. of Wis.
Editor of Milwaukee "Journal," 609 Grand Ave., Milwaukee.

Charles Frederick Viebahn.
1881, Superintendent of City Schools and Principal of High School, 703 Western Ave., Watertown.

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1890 **Judson E. Hoyt**, A.B., '80, Univ. of Wis.
1891, Superintendent of Schools, Menomonie.

1891 **Mary E. Doyle.**
1894, Superintendent of Training, State Normal School, West Superior Hotel, West Superior.

1892 **I. C. McNeill.**
1896, President of Superior State Normal School, West Superior.

M. V. O'Shea, B.L., '92, Cornell.
1895, Professor of the Science and Art of Education, University of Wisconsin, 140 Langdon St., Madison.

Albert Willis Tressler, A.B., '91, Univ. of Mich.
1900, Assistant Professor of Pedagogy and Inspector of High Schools, University of Wisconsin, 27 Mendota Court, Madison.

1893 **William George Bruce.**
Editor of "American School Board Journal," 435 Hanover St., Milwaukee.

894 **Richard B. Dudgeon**, A.B., '76, Univ. of Wis.
1891, Superintendent of Schools, 520 Jefferson St., Madison.

Dexter D. Mayne.
State Agent for Butler, Sheldon & Co., Madison.

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1894, President of State Normal School, 402 Pine St., Stevens Point.

WISCONSIN—*Continued*

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1902, Principal of Waupaca County Training School for Teachers, New London.
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1892, Editor of "Western Teacher" and "Gillan's Monthly." 141 Wisconsin St., Milwaukee.
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1898, President of State Normal School, 107 Mt. Vernon St., Oshkosh
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1884, Inspector of Practice Teaching, State Normal School, 37 Elm St., Oshkosh.
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Wisconsin State Agent, American Book Co., Box 726. Milwaukee.
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1902, Superintendent of Schools, Stevens Point.
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1891, Professor of History and Civics, East Side High School, 229 Pleasant St., Milwaukee.
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1894, Principal of East Side High School, 719 Webster Ave., Green Bay.
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1899, Vice-President of State Normal School, 2510 Sycamore St., Milwaukee.
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1896, Superintendent of Schools, 315 Oxford Ave., Eau Claire
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1869, Assistant Teacher, 170 Mason St., Milwaukee.
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1897, Superintendent of Schools, 412 Prospect Ave., Beloit.
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1892, Principal of High School, Plainfield.
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1886, Principal of Schools, Manitowoc.
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1887, Associate Principal and Proprietor of Hillside Home School, Hillside.
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1894, School Director, Polk County, West Denmark.
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1896, Institute Conductor, Instructor Geography and U. S. History in State Normal School, River Falls.
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1892, Principal of 16th District Primary School, 2916 Cedar St., Milwaukee.

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1897, Teacher of Mathematics in State Normal School, Platteville.

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1900, Director of Training School, State Normal School, Platteville.

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1893, Professor of Physics, State Normal School, 81 Bond St., Oshkosh.

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1898, Squire Professor of Mental Science and Philosophy, 717 Chapin St., Beloit.

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1901, Principal of Home School of Individual Instruction, 723 State St., Madison.

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1894, Agent for Ginn & Co., 209 S. Carroll St., Madison.

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1899, Superintendent of Schools and Principal of High School, Ft. Atkinson.

George Philip Hambrecht.
1902, Student, Harvard University; res., Tomah.

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1900, Principal of High School, Ripon.

1900 **A. H. Fletcher.**
1901, Teacher of English and Physical Geography, State Normal School, River Falls.

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1886, Supervisor of Practice, State Normal School, River Falls.

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1901, State School Inspector, 416 W. Main St., Madison.

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1900, Superintendent of Schools, Superior; res., West Superior.

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1896, Assistant Professor in Philosophy, University of Wisconsin, 27 Mendota Court, Madison.

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1897, Teacher of Latin, State Normal School, 119 N. Prairie St., Whitewater.

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1896, Instructor in Mathematics, Superior State Normal School, 2014 Ogden Ave., West Superior.

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1902, Teacher of History and Literature, State Normal School, River Falls.

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1888, Professor of German and Social Science, University of Wyoming, 407, 9th St., Laramie.

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1899, State Superintendent of Public Instruction, 1308 Ferguson St., Cheyenne.

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1898, President of the University of Wyoming, Laramie.

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Principal of Kamehameha Schools, Honolulu.

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1900 Principal of the Kaiulani School, cor. College and Dominis Sts., Honolulu.

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1900, Assistant Commissioner of Education, San Juan; home address, Union, O.

Enrique C. Hernandez A.M., '89, Univ. of Madrid.
1900, Secretary to Commissioner of Education, San Juan.

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1901, Division Superintendent of Schools, Manila

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1901, Deputy Division Superintendent of Schools 10 Washington St., Capiz, Panay

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1902, Principal of Public Schools, Molo, Panay.

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1898, Lecturer on Education in the University of Cambridge, and Teacher of Method in the C. U. Day Training College, 16 Warkworth St., Cambridge.

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1881, Professor of Systematic Theology, etc., Theological Seminary, Marash.

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Barnes, O. P., Kan., '95
Barnes, Sarah D., R. I., '99
Barnett, W. W., Tex., '01
Barnum, Anna, N. D., '97
Barr, Jas. A., Cal., '98
Barr, Robert J., Neb., '99
Barrett, A. T., Tenn., '94
Barrett, Chas. S., Ohio, '95
Barrett, H. M., Colo., '95
Barrett, R. C., Iowa, '96
Barrett, S. M., Mo., '97
Barringer, Wm. N., N. J., '94
Barrows, F. W., N. Y., '01
Barstow, C. L., N. Y., '97
Barten, Wm. H., S. D., '01
Bartholf, Wm. J., Ill., '97
Bartholomew, Susie M., Ky., '94
Bartholomew, W. H., Ky., '77
Bartlett, Wm. A., Minn., '97
Barton, R. L., Mo., '97
Bascom, John, Mass., '84
Bashford, Jas. W., Ohio, '94
Bass, E. E., Miss., '95
Bass, Geo. F., Ind., '96
Bass, Willard S., Ill., '01
Bates, Wm. C., Mass., '96
Battin, Benjamin F., Pa., '02
Bauer, N. L. A., La., '01
Bauman, E. G., Ind., '98
Baxter, Chas. J., N. J., '96
Baxter, J. K., Ohio, '01
Bayley, W. D., Pa., '00
Bayliss, Alfred, Ill., '96
Baylor, Adelaide S., Ind., '97
Beach, Wm. H., Wis., '96
Beadle, Wm. H. H., S. D., '90
Beane Geo. S., Minn., '02

Beard, Alice F., Hawaii, '02
**Beardshear, W. M*., Iowa, '89
Beardsley, A. E., Colo., '95
Beattie, J. A., Ohio, '99
Beattys, Frank D., N. Y., '94
Beazell, Jas. H., Mich., '97
Becht, J. Geo., Pa., '96
Beck, Geo., Ind. Ter., '84
Beechy, A. D., Ohio, '00
Beggs, Robt. H., Colo., '84
Beggs, S. S., Mich., '96
Beistle, Ella, Ohio, '97
Belknap, Emmet, N. Y., '92
Bell, A. Graham, D. C., '84
Bell, Hill M., Iowa, '01
Bell, Thomas H., Ohio, '01
Bell, William, Iowa, '02
Bell, Wm. A., Ind., '76
Bellevue College, Neb., '97
Bellis, Wm., Mich., '01
Beloit Sch. Board, Wis., '84
Bender, Ida C., N. Y., '95
Benedict, J. C., N. Y., '01
Benedict, J. D., Ind. Ter., '02
Benedict, W. H., N. Y., '92
Bennett, Chas. A., Ill., '96
Bennett, C. W., Ohio, '84
Bennett, Mrs. L. A., N. J., '96
Bennett, Myron E., Me., '01
Benson, B. K., Ga., '00
Benson, Christine M., Cal., '97
Bentley, F. W., Ill., '02
Benton, Geo. W., Ill., '94
Benton, Guy Potter, Ohio, '02
Berg, P. S., N. D., '02
Bergey, D. H., Pa., '98
Berkaw, Geo. R., Mich., '01
Berlin, A. H., Del., '96
Bernstein, Nathan, Neb., '00
Berringer, E. J., Ariz., '99
Berry, B. D., Ill., '95
Besley, Miriam, Ill., '01
Bessey, Chas. E., Neb., '95
Betts, Alice L., Ohio, '01
Bevan, T. W., N. Y., '01
Bevans, Homer, Ill., '97
Bickford, Chas. W., N. H., '01
Bicknell, Thos. W., R. I., '82
Bierly, H. Elmer, Fla., '99
Bigelow, Anson H., Iowa, '01
Bikle, Horace W., Pa., '02
Billingsly, J. J., Iowa, '95
Bingham, Cornelia D., Ill., '00
Bingham, Reuben S., Wash., '96
Bingham, Robt., N. C., '84
Birchard, C. C., Mass., '95
Bishop, Eliza A., Pa., '92
Bishop, J. Remsen, Ohio. '94
Bishop, Nathan L., Conn., '95
Bissell, Annie M., N. Y., '95
Bixler, W. S., Ill., '00
Black, C. C., Ark., '01
Black, Jas. C., Ind., '88
Black, S. T., Cal., '95
Black, Wm. H., Mo., '95
Blackshear, E. L., Tex., '00
Blair, Francis G., Ill., '99
Blair, John J., N. C., '95
Blake, E. J., Ill., '02
Blake, Mrs. E. M., Ark., '98
Blaker, Mrs. E. A., Ind., '96
Blakesley, O. J., Colo., '96
Blakiston, Mary, Ohio, '95
Blewett, Ben, Mo., '97
Bliss, Fred L., Mich., '95
Bliss, J. J., Ohio, '96
Bliss, Lafayette, Minn., '02
Block, Louis J., Ill., '99
Block, W. H., Ohio, '01
Blodgett A. B., N. Y., '90
Bloodgood, F. H., Iowa, '01
Bloom, La Fayette, Ohio, '00
B. of Ed., Abilene, Kan., '86
B of Ed., Beloit, Wis., '84
B. of Ed., Dodge City, Kan., '86
B. of Ed., Fulton Co., Ga., '01
B. of Ed., Janesville. Wis., '84
B. of Ed, La Crosse, Wis., '84
B. of Ed., Milwaukee, Wis., '84
B. of Ed., Nashville, Tenn., '89
B. of Ed, New Haven, Conn., '01
B. of Ed., Northfield, Minn., '90
B. of Ed., Oshkosh, Wis., '84
B. of Ed., Ottawa, Kan., '86
B. of Ed., Sedgwick, Kan., '86
B. of Regents, St. Nor. Sch., Wis., '84
Bodler, Anna, N. J., '98
Bodwell, Edwin J., Neb., '95
Bohannan, E. W., Minn., '02
Boice, H. B., N. J., '96
Bolenbaugh, G. B., Ohio, '96
Bolton, Fred'k E., Iowa, '00
Boltwood, H. L., Ill., '99
Bond, G. G., Ga., '94
Bond, J. D., Minn., '96
Bonebrake, L. D., Ohio, '90
Bonnell, E. N., Minn., '02
Bookmyer, T. W., Ohio, '01
Boone, Richard G., Ohio, '84
Booth, F. W., Pa., '00
Boston College, Mass., '97
Bostwick, O. P., Iowa, '96
Botkin, Mrs. S. C., Ariz., '99
Boutelle, C. M., Minn., '96
Bouton, Eugene, Mass., '95
Bowen, Frank W., N. J., '02
Bowers, H. W., Ind., '96
Bowles, J. J., Mo., '00
Bowman, G. L., Wis., '95
Bowman, J. N., Wash., '01
Boyd, David R., Okla., '92
Boyd, Mrs. Gaston, Kan., '97
Boyd, G. F., Miss., '01
Boyd, W. W., Ohio, '94
Boyden, Albert G., Mass., '90
Boyden, Arthur C., Mass., '97
Boyden, Helen W., Ill., '00
Boyden, Wallace C., Mass., '96
Boyle, Chas. A., Kan., '97
Boynton, F. D., N. Y., '01
Bracelin, Gertrude, Mich., '01
Bradford, Mary D., Wis., '02
Bradley, Chas. A., Colo., '93
Bradley, John E., Mass., '90
Bradley, Milton, Mass., '92
Bradner, Elbert, Ind., '01
Bradner, J. W., Ky., '01
Brandegee, J. E., N. Y., '96
Brandt, F. B., Pa., '97
Brant, Edith E., Iowa, '02
Breaker, Elizabeth, Ill., '02
Brelsford, Chas. H., Pa., '01
Brewster, D. H., S. D., '02
Bricker, Jas. I., Mich., '01
Brier, Warren J., Wis., '95
Briggs, R. D., Mich., '01
Brigham Young Coll., Utah, '98
Bright, O. T., Ill., '93
Bristol, E. N., N. Y., '96
Brittain, M. L., Ga., '00
Brock, H. Z., Mich., '97
Broderick, Kate G., N. Y., '96
Brooklyn Pub. Lib, N. Y., '01
Brooks, C. J., Ohio, '01
Brooks, Edw., Pa., '76
Brooks, Sarah C., Md., '94
Brooks, Stratton D., Mass., '01
Brown, C. A., Ala., '98
Brown, C E., Ill., '95
Brown, Claude. Ill., '00
Brown, Edwin N., Ohio, '01
Brown, Elias, D. C., '98
Brown, Eliz. V., D. C., '98
Brown, Ellis W., D. C., '98
Brown, Elmer E., Cal., '91
Brown, Eugene, Iowa, '97
Brown, Geo. A., Ill., '02
Brown, Geo. P., Ill., '80
Brown, Geo. W., Mass., '96
Brown, H. B., Ind., '95
Brown, Henry E., Ill., '01
Brown, Hugh, Ill., '98
Brown, J. B., Minn., '01
Brown, J. L., Utah, '99
Brown, John A., N H., '99
Brown, John F., Iowa. '96
Brown, J. Stanley, Ill., '97
Brown, Marion, La., '89
Brown, Merle S., Neb., '02
Brown, R. A., Ohio, '01
Brown Univ. Library, R. I., '01
Brown, Wm. O., Wis., '96
Brown, Z. H., Tenn., '00
Brownell, H. G., Ky., '01
Brownson, E.R., N. D., '02
Bruce, Wm. G., Wis., '93
Brumbaugh, G. W., Ohio, '96
Brumbaugh, M. G., Pa., '93
Bruot, Marie L., Ohio, '96
Bryan, Jas. E, N. J., '02
Bryan, L. C., Iowa, '02
Bryan, Wm. J. S., Mo., '99
Bryan, Wm. L., Ind., '93
Bryant, Miss C. L., Mo. '99
Bryant, Forrest B., Ohio, '01
Bryant, Jas. C., Cal. '02
Bryn Mawr Coll., Pa., '99
Bryson Library, Teachers Coll. N. Y., '98
Buchanan, Elizabeth. Mo., '00
Buchanan, Geo. V., Mo., '94
Buchanan, John T.. N. Y., '90
Buchholz, L. W., Fla., '98
Buckland, B. J., Minn., '01
Budd, Mrs. Nellie M., Minn., '01
Budde, Clara M., Iowa, '02
Buechele, J. L., Iowa, '97
Buehrle, R. K., Pa., '92
Buffalo Pub. Library, N. Y., '99
Bugbee, Percy I., N. Y., '01
Bulfinch, Mary A., Wis., '02
Bunnell, R. F., Ill., '01
Burchell, D. Earle, Utah, '01
Burdick, A. Hall, N. Y., '92
Burgess, I. B., Ill., '99
Burk, Fred L., Cal., '92
Burke, J. E., Mass., '95
Burks, J. D., N. Y., '99
Burlingame, Florence, Minn.. '02
Burnham, Ernest, Mich., '01
Burnham, Smith, Pa., '01
Burnham, W. R., Conn., '99
Burns, G. W. Ohio, '00
Burns, J. J., Ohio, '80
Burns, Ralph H., Minn., '96
Burris, Wm. P., N. Y., '95
Burt, Amy M., Vt., '00
Bushnell. H. T., Iowa, '97
Butler, Nicholas M., N. Y., '85
Butler, Sarah H., Ill., '02
Butler University, Ind, '00
Butler, W. D., Tex., '02
Butte Free Pub. Lib., Mont., '00
Button, Wm. J., Ill., '96
Butts, Annice E. B., Ill., '96
Buzzell, Delos, Ill., '97
Cabell, B. F., Ky., '02
Cahalan, Mary A., Ala., '95
Caldwell, B. C., La., '96
Caldwell, B. H., Ark., '01
Caldwell, H. W., Neb., '96
Caldwell, J. H., Ark., '01
Call, Arthur D., Conn., '98
Cammack, Ira I., Mo., '95
Camp, Anna R.. Ill., '02
Camp, David N., Conn., '92
Campbell, A. A., Ind., '01
Campbell, A. G., Kan., '86
Campbell, Jas. R., Okla., '01
Campbell, Julia, Wis., '97
Campbell, Mary R., Ill.. '02
Campbell, W. H., Ill., '95
Campbell, W. T., Wash., '01
Canfield, Jas. H., N. Y., '84
Canisius College, N. Y., '02
Cannon, Geo. L., Colo., '95
Cannon, Miss H. D., Cal., '99
Capen, Elmer H., Mass., '96

Cardiff Free Public Libraries, Wales, '00
Carey, C. E., Ohio, '95
Carfrey, J. H., Mass., '97
Cargo, R. M., Pa., '96
Carlson, Alfred C., Utah, '02
Carlisle, Ellor E., Mass., '00
Carman, Geo. N., Ill., '00
Carnahan, J. W., Ohio, '01
Carnegie Library, Allegheny, Pa., '01
Carnegie Library, Pittsburg, Pa., '99
Carpenter, E. A., Mich., '01
Carpenter, Ellen W., Ill., '01
Carpenter, Estelle, Cal., '01
Carpenter, J. H., Wis., '84
Carr, J. M., Ohio, '98
Carr, J. W., Ind., '97
Carrington, W. T., Mo., '99
Carroll, C. F., Mass., '95
Carroll, Mary H., N. Y., '98
Carson, C. H., Jr., La., '00
Carson, John F., S. D., '01
Carter, Joseph, Ill., '99
Cary, Alice D., Ga., '98
Cary, C. P., Wis., '97
Case, Richard, N. J., '94
Casey, W. V., Colo., '95
Cashin, Alice M., Ill., '02
Cassilly Francis B., Ill., '99
Caterson, Eliza A., N. Y., '01
Cates, E. E., Md., '98
Caviness, A. L., Neb., '01
Chadsey, Chas. E., Colo., '95
Challman, S. A., Minn. '02
Chalmers, W. W., Ohio, '95
Chamberlain, A. H., Cal., '97
Chambers, Will G., Minn., '01
Champlin Howard, Ohio, '96
Chancellor, Wm. E., N. J., '00
Chandler, Harley P., Cal., '02
Chandler, John W., N. Y., '00
Chaney, Lucien W., Minn., '02
Chaney, N. H., Ohio, '00
Chapin, E. P., Mich., '01
Chapin, Mary L., Minn., '02
Chapman, F. E., Mass., '94
Chase, Susan F., N. Y., '98
Chase, W. J., Ill., '99
Cheever, W. H., Wis., '96
Chehock, H. W., Iowa, '02
Cheney, Augustus J., Ill., '84
Cheney, Francis J., N. Y., '91
Cheney, H. C., N. Y., '01
Chicago Pub. Library, Ill., '98
Chickering, John J., N. Y., '02
Childs Edward P., Ohio, '01
Christenberry, D. P., Ala., '99
Christenson, D. H., Utah, '01
Church, Geo. E., R. I., '92
Churchill, J. O., Wyo., '97
City Lib'y, Springfield, Mass., '98
Clair, Francis R., N. Y., '94
Clancy, Albert W., Ill., '92
Clancy, N. J., Tex., '97
Clark, Edward O., Mass., '98
Clark, Esther A., Neb., '01
Clark, Frances E., Iowa, '02
Clark, Frank H., Colo., '86
Clark, F. H., Cal., '99
Clark, Mrs. Ida H., Tenn., '00
Clark, Jessie L., Kan., '95
Clark, John S., Mass., '92
Clark, L. H., Wis., '84
Clark, V. S., D. C., '99
Clark, W. A., Neb., '95
Clarke, Elva E., Kan., '94
Clarke, Ernest P., Mich., '01
Clarke, Francis D., Mich. '97
Classen, Mrs. A. W., Cal., '89
Claxton, P. P., Tenn., '98
Cleary, P. R., Mich., '01
Clement, Arthur G., N. Y. '01
Clendenen, T. C., Ill., '97
Cleveland Pub.Lib'y,Ohio, '97
Clinton, Geo. W., Ky., '02
Clippinger, E. E., Fla., '01
Clock, Mrs. D. v. H., Ill., '01
Cloyd, David E., N. Y., '02
Clum, George V., Ill., '99
Coates, T. C., Ohio, '01
Cobb, Chas. D., N. C., '00
Cobb, Chas. N., N. Y., '94
Cobb, Collier, N. C., '99
Cobb, Richard, Mass., '02
Coburn, F. F., Mass., '99
Coburn, Wm. G., Mich., '95
Cochran, R. A., Ariz., '02
Cochrane, W. E., N. Y., '98
Coddington, A. O., Ill., '93
Coddington, E. A., P. I., '00
Coe, Emily M., N. C., '80
Coffin, C. W. D., N. Y., '00
Cogswell, Francis, Mass., '93
Colby, E. C., N. Y., '96
Cole, Aaron H., Ill., '02
Cole, Arthur C., Vt., '01
Cole, Chas. H., W. Va., '98
Cole, Chas. W., N. Y., '92
Cole, George F., N. Y., '01
Cole, Wm. H., W. Va., '70
Colegate University, N. Y., '02
Colegrove, C. P., Iowa, '97
Colegrove, P. P., Minn., '00
Coleman, E. N., Iowa, '98
Coleman, J. T., S. C., '00
College, Agr., of Kan., '97
College, Amherst, Mass., '97
College, Bellevue, Neb., '97
College, Boston, Mass., '97
College, Brig. Young,Utah,'98
College, Bryn Mawr, Pa., '99
College, Butler, Ind., '00
College, Canisius, N. Y., '02
College, Conn. Agr., '99
College, Dickinson, Pa., '99
College, Emory, Ga., '01
College, Hendrix, Ark., '97
College, Hillsdale, Mich., '00
College, Iowa, Grinnell, '00
College, Iowa State, Ames, '01
College, Lincoln, Ill., '97
College, Midland, Kan., '99
College, Montana State, '99
College, Mt. Holyoke, Mass., '02
College of St. Francis Xavier, N. Y., '00
College of the Holy Cross, Mass., '01
College, Pa. State, '00
College, Pomona, Cal., '99
College, Pritchett, Mo., '00
College, Ripon, Wis., '02
College, Smith, Mass., '98
College, South Carolina, '02
College, South Dak. Agr., '99
College, Valparaiso, Ind., '97
College, Vassar, N. Y., '98
College, Wabash, Ind., '95
College, Waynesburg, Pa., '02
College, Wellesley, Mass., '00
College, Wheaton, Ill., '99
College, Whitman, Wash., '01
College, Williams, Mass., '97
College, Woman's, Md., '99
Collins, E. E., S. D., '99
Collins, J. H., Ill., '95
Collins, Mrs. J. H., Ill., '95
Collins, John S., Mo., '97
Collins, Mary T., Ill., '01
Collins, Nellie C., Ill., '02
Columbia Sch. of Oratory, Ill., '02
Columbia University, N.Y.,'95
Comings,Fannie S.,N.Y., '95
Comstock, D. Y., Vt., '99
Comstock, E. H., Mich., '01
Comstock, T. B., Cal., '95
Condon, Randall J.,Mont.,'01
Congdon, C. H., N. Y., '94
Conger, Chas. T., Minn., '01
Conkling, W. E., Mich., '96
Conley, Geo. H., Mass., '97
Conn. Agri. College, '99
Connelley, C. B., Pa., '01
Conniff, John R., La., '01
Converse, F. E., Wis., '97
Conway, Clara, Tenn., '87
Conwell, R. H., Pa., '01
Cook, Albert P., Mich., '01
Cook, Albert S., Md., '02
Cook, Chas. F., Me., '98
Cook, E. H., Colo., '85
Cook, Elizabeth B., Ill., '96
Cook, Fayette L., S. D., '75
Cook, Francis E., Mo., '02
Cook, Geo. B., Ark., '95
Cook, H. Moreland, N. D., '01
Cook, Ida M., Ill., '99
Cook, Mrs. Jessie W., Cal., '01
Cook, John W., Ill., '90
Cook, Newell, Mich., '01
Cook, Webster, Mich., '01
Cooley, Mrs. A. W., N. D., '96
Cooley, E. G., Ill., '97
Cooley, F. A., Cal., '99
Cooley, F. W., Ind., '95
Cooley, L. C., N. Y., '96
Cooper, Erma E., Mich., '01
Cooper, F. B., Wash., '94
Cooper, F. I., Mass., '93
Cooper, Milton C., Pa., '01
Cooper, O. H., Tex., '94
Coover, Nathaniel, Kan., '86
Copeland, A. B., Colo., '99
Copeland, Chas. H., Ind., '99
Corbett, H. R., Ill., '90
Corbin, J. C., Ark., '98
Cornell Univ Library,N.Y., '96
Corson, O. T., Ohio, '87
Corthell, W. J., Me., '92
Co. Teachers' Asso.,Wis., '84
Cottingham, J. M., Mo., '97
Cotton, F. A., Ind., '98
Coulter, Minnie, Cal., '99
Courville, Elizabeth, Mich., '01
Covey, Claude C., S. D., '01
Cowgill, Paul A., Ind., '98
Cowing, Helen H. Ohio, '01
Cowles, Dudley R., Ga., '01
Cox, Edwin B., Ohio, '89
Cox, E. Morris, Cal., '96
Cox, Henry C., Ill., '95
Cox, Jean N., N. J., '97
Cox, Wm. J. M., Ill., '99
Coy, Emma, Ill., '97
Coy, E. W., Ohio, '83
Crabbe, J. G., Ky., '97
Crabtree, J. W., Neb., '95
Craig, Arthur U., D. C., '99
Craig, Oscar J., Mont., '92
Craig, Wm. B., Iowa, '00
Crane, Mrs. Chas. R., Ill., '97
Crane, F. E., Ohio, '01
Crane, Frank, S. D., '95
Crane, Julia E., N. Y., '95
Crane, Wm. I., Iowa, '99
Cranston, R. W., Minn., '96
Creager, W. B., Ariz., '99
Crissy, I. O., N. Y., '98
Crist, Henry M., N. Y., '96
Critchett, E. T., Minn., '98
Crittenton, Lillie, Ill., '02
Crockett, May M., Ill., '95
Crone, John V., Colo., '02
Cronebaugh, C. L., Ohio, '99
Cropsey, Miss N., Ind., '91
Crosby Adams Sch., Ill., '01
Crosby, H. E., Minn., '01
Crosby, W. E., N. Y., '70
Crosier, M. E., Iowa, '95
Cross, J. G., Cal., '99
Croswell, Thos. R., Colo., '02
Crouch, Sarah E., Mo., '95
Crouse, Mrs. J. N., Ill., '93
Crouter, A. L. E., Pa., '00
Crowell, Geo. H., N. C., '98
Cruikshank, Jas., N. Y., '57

Cubberly, E P., Cal., '94
Culbertson,E D.Y , Iowa, '95
Culler, J. A., Ohio, '00
Cully, H H., Ohio, '02
Cummings, Edw. P , Mich.,'01
Cummins, J. P., Ohio, '00
Cunningham, J. B., Ala., '95
Cunningham, Phœbe, Wis., '01
Curran, Ulysses T., Ohio, '66
Currier, C. F. A., Mass., '00
Currier, E. H., N. Y., '97
Currier, Susan L., Wash., '01
Curtis, A. E., Mich., '96
Curtis, H. J., Minn., '01
Curtis, Virgil G., Ohio, '92
Curtiss, Fred A., Conn., '94
Cutler H. F., Mass., '02
Cutler, Mary B., Minn., '02
Cutter, Irving S., Neb., '02
Dabney, C. W., Tenn., '99
Dafoe, Geo. Eber, Wis., '97
Dailey, M. E., Cal., '98
Dakin, Mrs. Esse B., Ind., '01
Dana, Fenella, Kan., '95
Daniels, J. W., Idaho, '98
Dann, Hollis E., N. Y., '02
Darling, Frank W., Ill., '01
Darst, Warren, Ohio, '01
Davenport, Benella, Fla., '00
Davey, Vernon L., N. J., '00
Davidson, Chas. C., Ohio, '80
Davidson, F. P., Cal., '99
Davidson, Wm. M., Kan., '90
Davis, A. J., Pa., '98
Davis, Allan, D. C., '95
Davis, B. M., Cal., '01
Davis, Boothe C., N. Y.. '96
Davis, C. F., Vt., '02
Davis, Chas. L., N. D., '02
Davis, Ellery W., Neb., '99
Davis, Emma C., Ohio, '94
Davis, Geo. S., N. Y., '96
Davis, Geo. W., Ill., '96
Davis, Mrs. Grace D., Mo., '01
Davis, John W., N. Y., '95
Davis, Mrs. Mary R.,Conn.,'02
Davis, Mrs. M. M., N. Dak.,'02
Davis, W. M., Mass., '99
Davison, Frank P., Mass., '01
Dawson, H. T., N. Y., '95
Deahl, J. N., W. Va., '96
Dean, Alletta F., Wis., '01
Dean, Mrs. Annie B , Wis., '99
Dean, Arthur D., Mass., '01
Dean, R. B., Mich., '01
Deane, Chas. W., Conn., '89
Dearmont, W. S., Mo., '99
Dearness, F. W., Ohio, '01
Deatrick, W. W., Pa., '92
Decker, Wm. H., N. Mex., '99
DeGarmo, Chas., N. Y., '89
Delano, Edward C., Ill., '95
Delany, F. S., Ky., '02
Demarest, J. B. T., N. Y., '00
Denfeld, Robt. E., Minn., '90
Denison Univ. Lib'y, Ohio, '00
Dennis, Chas.E., Jr., R.I., '02
Dept. of Ed., Porto Rico, '02
Dept. of Pub. Instr., Ill., '99
Dept of Pub. Instr., Mich., '02
Dept. of Pub. Instr., Minn., '01
Dept. of Pub. Instr., Neb., '01
Dept. of Pub. Instr., N. Y., '01
Deputy, M. W., Ind., '01
Deupree, J. G., Miss., '97
Dewey, Jas. A., Pa., '93
Dewey, John, Ill., '97
Dewey, Melvil, N. Y., '92
De Wolf, Daniel F., Ga., '81
Dexter, E. G., Ill., '98
Dial, S. T., Ohio, '95
Dick, Fred., Colo., '95
Dickens, J. L., Tenn., '00
Dickey, C. L., Ohio, '95
Dickey, Homer B., Ind., '02
Dickinson College, Pa., '99
Dickinson, Frances, Ill., '01
Dickman, J. W., Iowa, '02
Dietrich, John, Colo., '95
Dill, Joseph M., Ala., '01
Dillman, L. M., Ill., '86
Dillon, J. M., N. Dak., '02
Dinsmore, J. W., Ky., '98
Dix, Wm. T., Ill., '96
Dixon, B. V. B., La., '97
Doane, Letitia L., Ill., '97
Dockrill, Jas. C., Ill., '01
Dodd, Arthur A., Mo., '95
Dodge, M. Luella, Ill., '97
Dodge, R. E., N. Y., '98
Dodge, Wm. C., Ill., '96
Dodsworth, Wm., Wis., '02
Doggett, W. E., N. Y., '00
Dolphin, Miss M. E., Kan., '95
Donohoe, Mary J., N. J., '94
Doud, Nettie C., Minn., '02
Dougherty, Mabel E., Ill., '96
Dougherty, N. C., Ill., '87
Doughty, Jas. C., Nev., '99
Douglass, A. H., Ind., '01
Douthett, A. T., Pa., '01
Dow, Jas. J., Minn., '96
Downey, Miss B. P., Mont., '99
Downing, A. S., N. Y., '91
Downing, M. W., Vt., '01
Downs, Edgar R., Colo., '94
Doyle, Mary E., Wis., '91
Doyne, J. J., Ark., '99
Dozier, Melville, Cal., '95
Draper, Andrew S., Ill., '88
Dreher, E. S., S. C., '96
Dresbach, A. M., Minn., '02
Dresser, Mrs. R. L. R., N. J.,'99
Drushel, A. W., Ohio, '02
Drybread, C. H., Ind., '02
Ducker, W. H., N. Y., '95
Dudgeon, R. B., Wis., '94
Dudley, Mrs. E., Iowa, '97
Duffy, Alice E., Iowa, '02
Dunphy, A. E., N. Dak., '02
Dunton, Charles H., Vt., '01
Dutcher, Edw. H., N. J., '99
Dutton, Bettie A., Ohio, '80
Dutton, Chas. F., Jr., Ohio, '01
Dutton, S. T., N. Y., '95
Dyer, Edwin F., Colo., '00
Dyer, F. B., Ohio, '96
Dyer, Frank R., Kan., '91
Dyke, Chas. B., Hawaii, '99
Eakins, Mrs. Millie R., N. J.,'96
Earhart, Gertrude, Wash., '02
Earhart, Lida B., Wis., '02
E. Ill St. Nor. School Ill., '99
Eastman, Wm. R., N. Y.. '96
Easton, Warren, La., '95
Eaton, G. A., Utah, '01
Eaton, Ira T., Ill., '94
Eaton, John, D. C., '93
Ebaugh, Z. C., Md., '97
Eberlein, Ella, Mo., '01
Eden, Philip, Wis., '84
Edgerly, Jos. G., Mass., '96
Editor's Library, N. Y., '97
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Edmund, Gertrude, Mass., '97
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Educational Asso. N. D., '96
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Edwards, H. R. Minn , '97
Edwards, W. A., Cal. '99
Edwards, W. S., Cal., '99
Ehinger, C. E., Pa., '97
Elder, Ella C . N. Y., '96
Elder, E. W., Colo., '95
Elgas, Mathew J., N. Y , '91
Eliot, Chas. W., Mass., '92
Elliff J D., Mo., '98
Elliott, A. M . Md., '99
Elliott, E. C , Colo., '99
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Elliott Nellie L., Iowa '01
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Ellis, Frank R., Ohio, '01
Ellis, John C., Ill., 87
Ellis, Wm. Austin, Mich , '87
Ellis, W. S , Ind., '00
Ellsworth, Henry W.,N.Y.,'96
Ellsworth, Jesse A., Vt., '01
Elmer, Frances A., Minn ,'97
Else, F. W., Iowa '02
Elson, W. H., Mich. '95
Elterich, Bertha, N. J., '00
Ely, Sarah Y., N. J., '92
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Emery, John Q., Wis , '84
Emm, Henry C., Minn. '00
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Estee, Jas. A., N. Y.. '96
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Evans, Elizabeth G., Ohio, '01
Evans, F H., Minn., '02
Evans, Lawton B., Ga., '94
Evans, Wm. P., Mo , '98
Everett, John P., Mich., '01
Ewing, R. D., Ill., '99
Ewing W. W., Ariz., '01
Faber, Jerdina, Cal., '01
Fairchild, E. T., Kan , '86
Fairweather, Miss E., Ohio, '02
Fall, Delos, Mich. '97
Fanning Mary A., Ill., '02
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Farley, D. H., N. J., '96
Farmer, A. E., Idaho '01
Farnham, Amos W.,N.Y., '01
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Farnsworth, S. A. Minn., '94
Farr, Herman A. Iowa, '02
Farrand, Wilson, N. J., '95
Farrell Edw. D., N. Y., '90
Farrington E. A., Cal. '01
Farson,M Elizabeth, Ill., '97
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Feely, Anne, Ill., '02
Felker, Allie M., Hawaii, '95
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Fell, Thomas, Md., '98
Felmley, David, Ill., '00
Fels, Maurice, Pa., '98
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Fenton, Geo., N. Y., '92
Ferguson, E. E., Mich., '96
Ferguson, S. J., Ill., '01
Fernald, M. C., Me., '90
Ferris, W. N., Mich., '99
Fillmore, Nettie, Ohio, '00
Finch, Dorothy, Mich., '01
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Fisher, Gilman C., Mass , '92
Fisher, H. W., Pa., '92
Fisk, Herbert F., Ill., '91
Fiske, Kate L., Minn., '02
Fiske, Wilbur A Ind '01
Fitch, Ferris S., Ariz., '90
Fitz. Geo. W., Mass , '98
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Fitzpatrick, F. A., Mass., '84
Fleshman, Arthur C., D C. '94
Fletcher, A. H., Wis., '00
Fletcher, S. S. F., Eng , '90
Flickinger, J. R , Pa., '98
Fling, Allen C., Neb , '98

Floyd, Charles L., Ala., '02
Floyd Laura D. Ind., '98
Foerste, A. F , Ohio, '96
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Foote, Mary C., Ill., '97
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Forbes Library, Mass., '01
Ford, Lyman H., Iowa, '97
Fordyce, Chas., Neb., '99
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Fortney, J. R., Ohio, '01
Foshay, Jas. A., Cal., '93
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Foster, John N., Wis., '01
Foster, Louise H., N. Y., '02
Fowler, W. K., Neb., '92
Fox, Wm. F., Va. '94
Francis, J. H., Cal., '99
Franck, Augusta L., Mich., '01
Frank, H. L., Ohio, '99
Franklin, Geo. A , Minn. '97
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Frasier, W. A., Vt., '00
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Frederick, J. M. H., Ohio., '01
Frederick, O. G., Mich., '00
Freebern, John R., Ill., '01
Freeman, J. H., Ill., '95
Freeman, John T., D. C , '98
Freer, H. H., Iowa, '84
Freitag, Lena C., Iowa, '01
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French, Harlan P., N. Y., '91
French, John D., Neb., '99
French, O. E , Iowa, '95
French, Permeal, Idaho, '99
Friars, R. E., Wash., '02
Friedberg, Wm. B., N. Y., '92
Friedel, Chas., Ore., '97
Friedman, Anna E., N. Y., '95
Frissell, H. B., Va., '00
Frogge, S. L., Ky., '01
Frost, H. H., Mich '95
Frost, J. M , Ill., '97
Fruchte, Amelia C., Mo., '96
Fry, W. W., Fla., '00
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Fuller, Sarah, Mass., '00
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Garrett, E. O., S. Dak., '02
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Garrett, Wm. R., Tenn. '86
Garrette, Irene, Iowa, '97
Garvin, John B., Colo., '95
Garwood, Ralph S., Mich., '01
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Giddens, L. P., Ala., '00
Gideon, Geo. D., Pa., '99
Gies, Fannie G., Minn., '01
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Gilbert, C. B., N. Y., '93
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Gilbert, Newell D., Ill., '95
Gill, Chas. M., Mo., '01
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Gillespie, Mary, Ill., '97
Gilley, Frank M., Mass., '02
Gilliam, R. F., S. C., '00
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Gilpin, S. W., Minn., '02
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Given, Miss M. E., D. C., '01
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Glase, Medora V., Tenn., '01
Glass, E. C., Va., '94
Gleason, R. S., S Dak., '02
Glenn, Chas. B., Ala. '00
Glenn, G. R., Ga., '95
Glotfelter, J. H., Kan., '99
Glover, Nathan L., Ohio, '89
Gminder, A. J., Md., '98
Goddard, Carrie, Kan., '01
Goddard, Wm. E., Wis., '99
Goetzinger C., Minn., '02
Goggin, Catherine, Ill., '98
Golden, H. W., Pa., '98
Goodhue, Lincoln P., Ill., '93
Goodknight, J. L., Ill., '95
Goodman, Sarah B., Minn., '02
Goodnough, W. S., N. Y., '82
Goodrich, J. F., Mich., '01
Goodwin, A. C., Ind., '99
Goodwin E. R., Mass., '01
Goodyear, E. F., Cal., '99
Gordon, C. H., Neb , '00
Gordon, G. W., Tenn., '00
Gordon, Jos. C., Ill., '97
Gordy, J. P., N. Y., '96
Gordy, W. F., Conn., '98
Gorton, Chas. E., N. Y. '96
Goss, Mrs. J. A , Mich , '01
Gotwals, Jos. K., Pa., '92
Gove, Aaron, Colo., '88
Gower, Hattie F., Cal., '99
Gradwell, Ricord, Ill., '01
Graeser, C. A., S. C., '97
Graham, Albert B., Ohio, '00
Graham, B. C., Fla., '00
Graham, Hugh A., Mich., '95
Graham, Jas. D., Cal., '99
Grant, Miss A. L., D. C., '98
Grant, H. L., Minn., '96
Grape, Jacob, Md., '01
Gratz, Simon, Pa , '79
Grawn, Chas. T., Mich., '01
Gray, Arthur W., Cal., '00
Gray, Frank D., Ind., '00
Gray, H. W., N. Y., '98
Gray, Jennie B., N. C., '00
Greason, Elmira R., Okla., '00
Greeley, J. P., Cal., '88
Green, Cassie E., Ill., '02
Green, Jas. M., N. J , '92
Greene, John A., N. Y., '93
Greene, Josephine A., N. Y., '02
Greenlee, Chas. E., Wash , '02
Greenlee, L. C., Colo , '92
Greenman, A. V., Ill. '97
Greenwood, J. M., Mo., '86
Gregory, Benj. C., Mass., '94
Gregory, Lyman, Cal., '99
Grenfell, Helen L., Colo., '99
Grier, D. F., Pa., '01
Griffin, E. H., Md., '99
Griffin, J. S., Mich., '01
Griffin, Mary E., Mo., '01
Griffith, E. W., N. Y., '96
Griffith, Geo., N Y., '93
Griffiths, G. C., Ill., '96
Griggs, Herbert, Colo., '99
Grindle, H. D., Ohio, '98
Grisham, G. N., Mo., '00
Griswold, Wells R., Ohio, '01
Gross, Otis C., Wis., '96
Grosvenor, G. H., D. C., '01
Groszmann, M. P. E., N. Y., '94
Grote, Caroline, Ill., '01
Grove, M. A., Pa., '97
Grover, Edwin O., Ill., '00
Groves, Chas. W., Ill., '96
Grussendorf, D. A., Minn., '98
Gruver, E. A., N. Y., '00
Guden, Anna J., N. J , '94
Guilliams, J. M., Fla., '97
Guinther, I. C., Ohio, '00
Gunn, A. F., Cal., '99
Gunnels, H. C., Ala., '02
Gunnison, W. B., N. Y., '96
Guss, Roland W., Mass., '95
Guttmann, Albert, Wis., '97
Haas, Nelson, N. J., '01
Haddock, F. D., Mich. '02
Hadley, Hiram, N. Mex., '91
Hagemann, J. A., Wis., '99
Hagen, O. J., N. Dak., '02
Hagerty, C. T., N. Mex., '95
Haggett, Geo. B. N. Mex., '97
Haight, R. A., Ill., '95
Hailmann, W. N., Ohio, '79
Hale, Geo. D., N. Y., '91
Hale, Wm. G., Ill., '99
Hale, Wm. H. C., Mich., '01
Haley, Eliza A., Ill., '01
Haley, Margaret A., Ill., '01
Hall, Clark B., Mich., '01
Hall, C. W., Minn., '02
Hall, Dana W., Ill., '91
Hall, Edwin H., Mass., '99
Hall, Frank H., Ill., '97
Hall, G. Stanley, Mass., '91
Hall, H. L., Ind., '01
Hall, Isaac Freeman, Mass., '95
Hall, L. J., Mo., '02
Hall, Loyal Freeman, Pa., '93
Hall, Winfield S., Ill., '99
Halland, J. G., N. D., '97
Halleck, R. P., Ky., '97
Hallock, Miss M. L., Wash., '02
Halsey, Rufus H., Wis., '95
Ham, Thomas C., Ill., '01
Hambrecht, Geo. P., Wis., '99
Hamilton, Jas. M., Mont., '95
Hamilton, J. M., Ohio, '00
Hamilton, J. W., Ind., '00
Hamilton, R. I., Ind., '96
Hamilton, Sam., Pa., '98
Hamilton, Wm., D. C., '98
Hamlin, Cyrus, Miss., '99
Hammel, J. C., Cal., '99
Hammel, W. C. A., Md., '00
Hammil, W. J., Ill., '01
Hampton, Miss C., Fla., '00
Hampton Institute, Va., '99
Hancock, John A., Minn., '95
Hand, W. H., S. C., '96
Hanna, G. W., N. D., '00
Hanna, John C., Ill., '98
Hansen, Fred E., Iowa, '01
Hanson, Willis E., Mich., '01
Hanstein, Herman, Ill., '01
Hanus, Paul H., Mass., '95
Hard, M. E., Ohio, '01
Hardy, Richard, Ill., '94
Hare, Wm. B., Fla., '01

Hargrove, Ruth E., Tenn., '02
Harison, W. B., N. Y., '92
Harlan, B. B., Ohio, '01
Harper, Wm. R., Ill., '95
Harrington, C. L., N. Y., '98
Harris, Abram W., Md., '98
Harris, Ada Van Stone, N. Y., '95
Harris, Alice L., Ind., '01
Harris, Edw. L., Ohio, '94
Harris, Edwin S., N. Y., '98
Harris, Henry E., N. J., '93
Harris Inst. Lib'y, R. I., '99
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Harris, J. C., Ga., '99
Harris, J. M., Pa., '02
Harris, Julia A., Ohio, '94
Harris, J. V., Fla., '00
Harris, Minerva G., Ohio, '02
Harris, T. G., Tex., '95
Harris, Wm. T., D. C., '76
Harrison, Mrs. A. M., Neb., '00
Harrison, Elizabeth, Ill., '95
Harrison, Miles W., Ind., '96
Hart, Albert B., Mass., '95
Hart, B. F., Ill., '02
Hart, James R., S. Dak., '99
Hartigan, Mary S. L., Ill., '95
Hartman, Mary, Ill., '95
Hartwell, Chas. S., N. Y., '02
Hartwell, S. O., Mich., '01
Harvard Coll. Lib'y, Mass., '95
Harvey, G. I., Okla., '86
Harvey, L. D., Wis., '84
Harvey, N. A., Ill., '97
Harwood, Samuel E., Ill., '00
Haskins, C. H., Mass., '99
Hatch, Erwin S., S. Dak., '02
Hatch, Ida P., S. D., '99
Hatch, W. E., Mass., '97
Hatch, W. H., Ill., '95
Hatfield, C. B., Ky., '00
Haupert, Chas., Ohio, '93
Haupt, J. G., La., '96
Haven, Caroline T., N. Y., '96
Hawkins, Geo. K., N. Y., '00
Hayden, H. B., Ill., '97
Hayden, P. C., Iowa, '95
Hayes, C. L., Fla., '00
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Hayes, H. E., N. Y., '02
Hayes, Mercy J., Mich., '01
Hays, Dudley G., Ill., '97
Hays, James L., N. J., '00
Hayward, Edw., N. Y., '95
Hayward, Emily A., Ill., '84
Hazen, Lillian D., Cal., '99
Heacock, E. H., Kan., '01
Heape, Jos. R., Eng., '02
Hearn, Arthur E., Can., '02
Heath, D. C., Mass., '91
Heaton, T. L., Cal., '99
Hebden, Edwin, Md., '00
Heckman, S. B., P. R., '01
Heermans, Josephine, Mo., '96
Hefter, Celia, Ill., '01
Heidler, S. H., Ill., '97
Heighway, F. F., Ind., '99
Heineken, J. F. D., N. J., '94
Heizer, John A., Ohio, '99
Heller, Regenia R., Mich., '01
Helmer, Harry, Ill., '95
Helter, Henry H., Ohio, '01
Henderson, Mrs. K. A., Ill., '97
Henderson, Lena V., Mich., '01
Hendrick, Welland, N. Y., '95
Hendricks, J. P., Mont., '98
Hendrix College, Ark., '97
Henninger, J. W., Ill., '96
Henry, Jas. A., Tenn., '96
Henry, T. B., Kan., '00
Henson, M. A., Ohio, '96
Herey, Emma M., Colo., '01
Hernandez, E. C., P. R., '01
Herrick, C. A., Pa., '00
Herrig, Anna B., S. D., '95
Hershman, W. H., Ind., '96
Hertel, Chas., Ill., '95
Hervey, Henry D., R. I., '96
Hervey, Walter L., N. Y., '95
Herzog, Peter, Mo., '97
Hess, Henry C., Minn., '01
Hess, M. E., W. Va., '01
Hess, Wm. C., N. Y., '96
Hester, W. A., Ind., '95
Heumann, F. G., Mich., '02
Hewes, W. D., N. Y., '96
Hewett, Edgar L., N. Mex., '99
Hewett, Edwin C., Ill., '84
Hewitt, Kathryn I., N. Y., '01
Hiatt, Amos, Iowa, '01
Hickok, W. H., Wis., '02
Hicks, W. E., N. D., '01
Hill, A. H., Ky., '01
Hill, A. Ross, Neb., '99
Hill, Frank A., Mass., '95
Hill, I. W., Ala., '01
Hill, Mary, Wis., '96
Hill, Walter B., Ga., '99
Hilleboe, H. S., Minn., '02
Hillis, R. C., Ind., '00
Hillsdale College, Mich., '00
Hillyer, V. M., Md., '01
Himelick, R. W., Pa., '00
Himes, Robert, W. Ohio, '99
Hinemon, J. H., Ark., '96
Hinshaw, E. B., Ind. Ter., '00
Hise, I. C., Iowa, '00
Hiser, W. S., Ind., '98
Hisey, Jos. C., Ill., '94
Hitchcock, F. S., Conn., '01
Hitz, John, D. C., '80
Hobbs, W. W., Minn., '02
Hobe, Augusta W., Cal., '89
Hockenberry, J. C., N. J., '01
Hodgdon, Miss J. E., N. Y., '82
Hodgin, Chas. E., N. Mex., '95
Hodgin, Cyrus W., Ind., '95
Hoegelsberger, Nora, D. C., '98
Hofer, Amalie, Ill., '95
Hoffman, Benj. F., Mo., '97
Hoffman, Gaius, N. J., '94
Hogan, Louise E., D. C., '98
Hogan, Serena B., Ill., '02
Hogg, Alex., Tex., '74
Hohfeld, Edw., Cal., '02
Holbrook, Florence, Ill., '01
Holden, C. C., N. Y., '98
Hollingsworth, J. L., Fla., '95
Holman, W. C., Mo., '01
Holmes, Evelyn, S. C., '00
Holmes, M. A., S. C., '00
Holmes, Manfred J., Ill., '00
Holton, Miss M. A., Minn., '96
Homans, Amy M., Mass., '91
Hooper, J. T., Wis., '02
Hooper, Louis L., D. C., '00
Hooper, Sanford A., Cal., '89
Hoose, James H., Cal., '79
Hoover, W. E., N. D., '97
Hopkins, A. H., Ill., '01
Hopkins, B. Smith, Mich., '01
Hopper, Kate A., Mich., '01
Horchem, B. J., Iowa, '97
Hornberger, J. A., Neb., '95
Hotchkiss, H. V., Ohio, '00
Houck, Henry, Pa., '97
Hough, Theodore, Mass., '02
House, L. J., Ohio, '98
Houser, C. W., Ky., '02
Housh, W. H., Cal., '99
Houston, Harvey, Conn., '01
Houston, J. R., Ind., '96
Howard, F. E., Conn., '96
Howard, Geo. A., Ohio, '95
Howard, Olive, Mich., '01
Howe, Agnes E., Cal., '99
Howe, Edward G., Ill., '01
Howe, Geo. H., Ill., '98
Howe, Laura, Ariz., '01
Howe, S. B., N. Y., '95
Howe, Wilbur W., N. Y., '95
Howell, Geo., Pa., '96
Howerth, Ira W., Ill., '99
Hoyt, C. O., Mich., '97
Hoyt, David W., R. I., '98
Hoyt, Franklin S., Ind., '01
Hoyt, Judson E., Wis., '90
Hoyt, J. W., D. C., '70
Hubbard, Mrs. E. A., Ill., '97
Hubbell, G. A., N. Y., '01
Hudson, Arthur S., Mich., '01
Huffman, Ashley J., Ohio, '01
Huffman, J. R., Ohio, '98
Hufford, Geo. W., Ind., '94
Huggett, J. P., Iowa, '01
Hughes, Mrs. Ada M., Can., '95
Hughes, Isaac H., Mo., '98
Hughes, Jas. L., Can., '90
Hughes, J. L., Ill., '98
Hughes, John F., N. Y., '98
Hughes, P. M., D. C., '02
Hughes, R. C., Wis., '00
Hughes, R. L., Ind., '00
Hughes, W. F., Ohio, '00
Huling, Ray Greene, Mass., '91
Hull, John, Wash., '91
Hull, Lawrence C., N. Y., '93
Hull, Philip M., N. Y., '99
Hull, Warren C., Mich., '97
Hulsart, J. H., N. J., '99
Hultman, Miss A. S., S. D., '02
Humke, Albert E., Ind., '93
Humphrey, S. P., Ohio, '00
Hunt, Mary H., Mass., '87
Hunter, A. D., Cal., '99
Hunter, J. M., S. Dak., '02
Hunter, Thos., N. Y., '85
Hurd, Geo. B., Mass., '88
Hursh, Samuel B., Ill., '00
Hussey, A. W., Ill., '97
Hussey, J. M., Iowa, '01
Hutchinson, J. C., Minn., '02
Hutchinson, N. E., Ohio, '00
Hutchison, Miss K. I., Minn., '01
Hutton, A. J., Wis., '84
Hutton, Chas. E., Cal., '95
Hutton, Thos. B., Iowa, '00
Hyatt, F. H., Cal., '99
Hyde, Martha, Colo., '01
Hyde, Mary F., N. Y., '92
Ill. State Nor. Univ., '98
Imperial Library of Japan, '00
Ind. Nor. Sch. of Pa., '99
Ind. State Library, '97
Ind. State Nor. Sch., Ind., '97
Ind. Univ. Library, '99
Ingalls, Will C., N. J., '94
Ingerson, Carl I., Mo., '00
Iowa College, Grinnell, '00
Iowa St. Coll. Lib'y, Ames, '01
Irons, Foster H., Tenn., '00
Irvine, V. K., Pa., '01
Isaacs, Louis N., Minn., '02
Jack, Frank M., Wis., '01
Jackman, Wilbur S., Ill., '95
Jackson, B. B., Wis., '01
Jackson, Edw. F., Mo., '01
Jackson, Wm. R., Neb., '96
Jacob Tome Inst., Md., '98
Jacobs, Clementine, Iowa, '02
Jacobs, Mattie D., Iowa, '02
Jacobs, Walter Ballou, R. I., '94
James, Geo. F., Minn., '01
Jameson, H. W., N. Y., '97
Jandon, Thos. P., Jr., Mo., '98
Jeffers, F. A., Mich., '01
Jeffrey, J. H., Ind., '00
Jegi, John I., Wis., '01
Jenkins, O. P., Cal., '99
Jenkins, Sara D., N. Y., '95
Jenkins, Willis A., Va., '02
Jenner, G. L., Mich., '01
Jennings, C. D., Mich., '01
Jennison, Clara E., Minn., '02
Jensen, T. A., Wash., '02
Jersey City Pub. Lib., N. J., '97
Jesse, Richard H., Mo., '92
Jewett, A. V., Kan., '86
John B. Stetson Univ., Fla., '99
John Crerar Library, Ill., '97

Johns Hopkins Univ., Md., '99
Johnson, A. B., Ohio, '00
Johnson, Anna P., Ohio, '01
Johnson, A. P., Ill., '01
Johnson, Chas. W., Minn., '02
Johnson, D. B., S. C., '95
Johnson, Emma A., N. Y., '02
Johnson, Ernest H., Mass., '93
Johnson, F. W., Me., '98
Johnson, Henry, Ill., '99
Johnson, H. M., D. C., '98
Johnson, Jesse S., Ohio, '98
Johnson, J. Walter, Idaho, '01
Johnson, M. Edwin, Ill., '01
Johnson, Minnie C., N. C., '01
Johnson, M. W., Minn., '02
Johnson, S. Arthur, Colo., '94
Johnson, T. S., Kan., '99
Johnson, W. H., Mont., '95
Johnston, Mary S., Fla., '01
Johnston, T. A., Mo., '01
Johnstone, E. R., N. J., '96
Joliffe, Wm. M., Mich., '01
Jones, A. Leroy, N. Y., '99
Jones, Arthur O., Ohio, '91
Jones, E. A., Ohio, '84
Jones, E. C., Lloyd Wis., '97
Jones, Edward N., N. Y., '84
Jones, Edwin A., Mass., '01
Jones, Emma F., Ill., '97
Jones, Frank L., Ind., '95
Jones, Frank O., Conn., '02
Jones, Herbert J., Mass., '96
Jones, Jane Lloyd, Wis., '97
Jones, J. W., Ohio, '96
Jones, L. H., Mich., '89
Jones, Mattie, S. D., '94
Jones, Myra, Mich., '92
Jones, Richard, Tenn., '94
Jordahl, Sivert A., S. D., '01
Jordan, Chas. M., Minn., '93
Jordan, David S., Cal., '98
Joyce, Margaret E., Wis., '01
Joyce, Minnie F., Wis., '01
Joyner, J. Y., N. C., '98
Judson, Isaac N., Mo., '01
Kammann, C. H., Ill., '97
Kane, T. F., N. Y., '89
Kansas State Agri. Coll., '97
Karr, Grant, N. Y., '99
Kean, Lura B., Ohio, '00
Keane, John J., Iowa, '89
Keating, J. F., Colo., '95
Keeler, Fred. L., Mich., '01
Keeler, Harriet L., Ohio, '94
Keister, W. H., Va., '00
Kelley, Aug. H., Mass., '02
Kellogg, Amos M., N. Y., '90
Kelly, Catherine, La., '02
Kelly, John D., Ky., '01
Kelly, Lizzie, La., '02
Kelly, Matie D., Neb., '02
Kelsey, Earl J., Ill., '00
Kemper, T. Francis, W.Va., '01
Kendall, C. N., Ind., '95
Kendall, F. A., Ill., '95
Kenerson, A. H., Mass., '95
Kennedy, Jas. W., N. J., '94
Kennedy, John, N. Y., '99
Kennedy, Jos., N. Dak., '96
Kennedy, Laura, Minn., '02
Kennedy, P. P., Minn. '97
Kenyon, A. B., N. Y., '96
Keppel, F. P., N. Y., '01
Keppel, J. T., Minn., '02
Kerlin, W. D., Ind., '97
Kern, O. J., Ill., '00
Kerr, Wm. J., Utah, '95
Keyes, Chas. H., Conn., '95
Keyes, H. D., Wis., '01
Keyes, Mrs. Helen B., Conn., '01
Keyser, I. N., Ohio, '01
Keystone Lit. Soc., Pa., '98
Kiehle, D. L., Minn., '80
Kilbourn, Louie L., Ill., '02
Kilbourne, Effie J., Ill., '95
Kilpatrick, Wm. R., N. Dak., '98
Kimmel, M. A., Ohio, '93
Kincaid, Herbert T., Ohio, '95
King, Anne H., Ohio, '95
King, F. A., Ohio, '96
King, J. C., Iowa, '01
King, Robt. M., Ill., '01
King, Wm. F., Iowa, '84
Kingsley, Homer H., Ill., '01
Kinney, Burt O., Cal., '99
Kinnison, J. E., Ohio, '01
Kinsley, M. H., N. J., '92
Kirby, C. Valentine, Colo., '02
Kirk, Alfred, Ill., '99
Kirk, John R., Mo., '91
Kirk, Thos. J., Cal., '95
Kirk, W. H., Ohio, '01
Kirkpatrick, E. A., Mass., '97
Kirtland, R. H., Mich., '01
Kleeberger, Geo. R., Cal., '95
Klinker, J. W., Minn., '02
Klock, J. E., N. H., '86
Klossner, Lilian C., Minn., '02
Kneil, Thos. R., N. Y., '95
Knepper, Geo. E., Idaho, '98
Knight, Geo. W., Ohio, '02
Knight, G. L., S. C., '00
Knight, Lee R., Ohio, '00
Knight, R. F., Kan., '02
Koehler, Chas. F., S. Dak., '01
Koehler, Miss M. R., N. Mex., '99
Kolbe, Julia C., Ohio, '95
Koontz, J. A., Mont., '95
Koonz, Chas. H., Wis., '02
Kraege, F. G., Wis., '97
Krall, G. W., Mo., '98
Kratz, H. E., Mich., '90
Kraus-Boelté, Mrs. M., N.Y., '96
Krebs, H C., N. J., '01
Krécsy, Bela, Hungary, '93
Krieg, A. N., Ohio, '00
Krinbill, Geo. E., Ill., '02
Kroh, Carl J., Ill., '97
Krohn, Wm. O., Ill., '93
Krout, Chas. A., Ohio, '00
Krug, Joseph, Ohio, '01
Kruse, Edwina B., Del., '91
Kuhn, John P., Ohio, '01
Kunou, C. A., Cal., '99
Kunze, Wm. F., Minn., '02
Kuykendall, A. C., Ky., '98
Kyselka, Frank, Cal., '01
Ladd, A. J., Mich., '01
Lagomarsino, Cynthia, N. Y., '94
Laidley, Geo. S., W. Va., '01
Laird, Mrs. Ada E., Ohio, '90
Laird, S. B., Mich., '96
Lake, Theo. F., N. Y., '01
Lamar, C. P., Ill., '99
Lamb, Eli M., Md., '94
Lamb, Rachel E., Md., '94
Lambert, Vashti A., Ill., '95
Lamberton, Mary J., Pa., '92
Lamont, John F., Wis., '01
Lancaster, E. G., 'Colo., 99
Lancaster, G., Wash., '98
Landers, J. S., Ore., '99
Landrum, L. M., Ga., '97
Lane, Albert G., Ill., '84
Lane, Mrs. F. S., Ill., '94
Lane, Horace M., So. Am., '02
Lang, Mary A., Cal., '01
Lang, Ossian H., N. Y., '91
Lang, Rosa A., Ill., '01
Lange, D., Minn., '99
Lansinger, J. W., Pa., '98
Lapey, Louise M., N. Y., '95
Largent, S. D., Mont., '99
Larimer, Henry G., Kan., '86
Lark, F. E., Iowa, '97
Larkins, Chas. D., N. Y., '95
La Rowe, Eugene, Mich., '01
Lash, W. D., Ohio, '99
La Taste, Lucien V., Ala., '94
Lathrop, Mrs. C. N., Ohio, '93
Laughlin, W. Frank, Mich., '01
Lavers, E. C., Pa., '92
Lawrence, Isabel, Minn., '94
Lawrence Univ., Wis., '99
Laws, Annie, Ohio, '95
Lawson, Florence, Cal., '97
Lawton, Chas. E., N. Y., '96
Lay, Wilfrid, N. Y., '00
Layton, S. Herrick, Ohio, '95
Lazenby, Wm. R., Ohio, '95
Leach, Cephas H., Ill., '97
Leavell, Richard M., Miss., '96
Leavenworth, P. R., Vt., '01
Ledyard, Mary F., Cal., '02
Lee, Carena M., Colo., '01
Lee, James, N. Y., '92
Lee, L. B., Ill., '01
Lee, Lucius O., Turkey, '01
Lees, James T., Neb., '01
Lefavour, Henry, Mass., '01
Lehigh Univ., Pa., '99
Lehnerts, E. M., Minn., '99
Lehr, Henry S., Ohio, '01
Leipziger, Henry M., N. Y., '91
Leiter, Mrs. F. W., Ohio, '96
Leland Stanford Jr. Univ., Cal., '97
Lemon, Anna E., Cal., '98
Lemon, J. E., Ill., '99
Lenfest, B. A., Pa., '00
Lennon, Mary, N. Y., '02
Leonard, Albert, Mass., '91
Leonard, H. B., Ill., '01
Leonard, N. R., Mont., '02
Leslie, Miss H. S., N. J., '94
Levens, Lora, Minn., '02
Leverenz, H. F., Wis., '00
Leviston, Irwen, Minn., '95
Lewellen, John O., Ind., '96
Lewis, Anna D., Minn., '02
Lewis, Jane M., N. J., '02
Lewis, J. H., Minn., '99
Lewis, J. M., Mont., '01
Lewis, Leslie, Ill., '95
Lewis, W. F., Mich., '01
Libraries, Cardiff, Wales, '00
Library, Agri. Coll., Mich., '02
Library, Allegheny, Pa., '00
Library, Altoona Mech., Pa., '99
Library, Amherst Coll., Mass., '97
Library Association, Springfield, Mass., '98
Library, Athenæum, Minn., '98
Library, Boston, Mass., '00
Library, Brockport Nor. Sch., N. Y., '00
Library, Bryson, N. Y., '98
Library, Buffalo, N. Y., '99
Library, Butte, Mont., '00
Library, Carnegie, Allegheny, Pa., '00
Library, Carnegie, Pittsburg, Pa., '99
Library, Chicago Pub., Ill., '98
Library, Cleveland, Ohio, '97
Library, Congress, Chile, '01
Library, Detroit, Mich., '97
Library, Dover, N. H., '00
Library, Editors', N. Y., '97
Library, Emory Coll., Ga., '01
Library, Harris Inst., R.I., '99
Library, Harvard Coll., '95
Library, Imp., Japan, '00
Library, Ind. Univ., Ind., '99
Library, Jersey City, N. J., '97
Library, John Crerar, Ill., '97
Library, Kalamazoo, Mich., '01
Library, Malden, Mass., '00
Library, Manchester, Eng., '02
Library, Milwaukee, Wis., '98
Library, Mpls. Ath., Minn., '98
Library, M. T. Dept., Teachers Coll., N. Y., '99
Library, Newberry, Ill., '98
Library, N. H. State, '98
Library, N. Y. Public, '99

Library, Northwestern Univ., Ill., '02
Library, Olivia Rainey, N. C., '01
Library, Omaha, Neb., '98
Library, Ped., Supt. of Schs., Pa., '00
Library, Philadelphia, Pa., '97
Library, Port Jervis, N. Y., '99
Library, Pratt Inst., N. Y., '01
Library, Queens Borough, N. Y., '01
Library, Ripon Coll., Wis., '02
Library, Rockford, Ill., '99
Library, St. Joseph, Mo., '00
Library, St. Louis, Mo., '00
Library, Salem, Mass., '00
Library, SanFrancisco, Cal., '97
Library, Scoville Inst., Ill., '00
Library, Scranton, Pa., '99
Library, Somerville, Mass., '00
Library, Springfield, Mass., '98
Library, State, Cal., '99
Library, St. Hist. Soc., Wis., '84
Library, State, Ind., '97
Library, State, Mass., '98
Library, State, N. H., '98
Library, Superior N. Sch., Wis., '00
Library, Syracuse, N. Y., '98
Library, Topeka, Kan., '00
Library, Univ. of Ark., '01
Library, Univ. of Mich., '98
Library, Univ. of Minn., '01
Library, Univ. of Pa., '98
Library, Univ. of Wyo., '97
Library, Wheeling, W. Va., '01
Library, Wilmington, Del., '01
Library, Worcester, Mass., '98
Liebenberg, H. H., Wis., '02
Light, C. M., N. Mex., '95
Lightbody, Wm., Mich., '96
Limerick, A. N., Kan., '86
Lincoln College, Ill., '97
Lindgren, Edw. A., Minn., '02
Ling, Chas. J., Colo., '95
Ling, L. E. A., Iowa, '00
Little, Clara L., Colo., '95
Livingston, Alf., Tenn., '02
Livingston, J. W., Wis., '02
Locke, Geo. H., Ill., '01
Locke, John S., Me., '95
Logan, Anna E., Ohio, '96
Lollar, Ezra E., Ind., '99
Long, J. L., Tex., '96
Long, Paul J., N. C., '00
Longan, G. B., Mo., '97
Longenecker, G., Ill., '00
Loos, Chas. L., Ohio, '95
Lord, Edward, Mass., '97
Lord, Livingston C., Ill., '94
Lothrop, Mary O., Wis., '02
Lott, Henry C., Mich., '97
Louis, J. J. Iowa, '02
Love, A. A., N. D., '02
Lovell, Thos. B., N. Y., '96
Loveridge, L. E., Ill., '98
Lovett, Fulton N., Tex., '01
Low, Seth, N. Y., '95
Lowry, Charles D., Ill., '97
Lowther, L. A., Kan., '97
Luckey, E. D., Mo., '94
Luckey, G. W. A., Neb., '95
Ludlum, Mrs. M. H., Mo., '02
Luebke, Emma J., Wis., '97
Lukens, Herman T., Pa., '92.
Lull, H. Galen. Mich., '01
Lyle, E. G., Mo., '01
Lyman, E. A., Mich., '98
Lynch, Chas. P., Ohio, '94
Lynch, M. M., Va., '98
Lynch, S. A., Wis., '01
Lynch, Wm. H., Mo., '95
Lyon, Edmund D., Ohio, '98
Lyon, P. W. N. J., '98
Lyon, W. F., Mich., '97
Lyons, G. K. Ohio, '98
Lyons, Miss M. E., Ill., '02
Lyte, E. Oram, Pa., '91
Lyttle, E. W., N. Y., '98
Maas, J. J., Utah, '99
MacAlister, Jas., Pa., '95
MacCracken, John H., Mo., '01
Macdona, Kate P., N. Y., '95
MacDonald, John, Kan., '86
MacDonald, Margaret, Ill., '96
MacGowan, W. L., Pa., '96
Mack, Wm. S., Ill., '95
MacKenzie, David, Mich., '96
Mackey, E., N. J., '87
Mackey, Wm. A., N. Y., '94
MacLean, Geo. E., Iowa, '97
MacLean, Jas. A., Idaho, '01
MacVannel, J. A., N. Y., '01
Magovern, Mary A., N.Y., '96
Maharry, S. H., Ohio, '95
Maitland, Louise, N. Y., '98
Major, David R., Ohio, '98
Man, Gertrude E., Mont., '02
Manchester, O. L., Ill., '02
Mandeville, Jas. M., Mich., '96
Mann, C. E., Ill., '00
Manners, Chas. L., Ill., '01
Manness, S. E., N. J., '92
Mansfield, Edith, Pa., '01
Marble, A. P., N. Y., '80
Mardis, S. K., Ohio, '95
Mark, Cecil W., Cal., '98
Mark, E. H., Ky., '93
Marlatt, Abby L., R. I., '94
Marnell, Anna T., Ill., '02
Marquis, J. S., S. C., '98
Marsh, Clinton S., N. Y., '01
Marsh, I., Adelia, Ill., '01
Marsh, Miles E., Ky., '98
Marshall, T. M., W. Va., '77
Martin, A. E., Ind., '01
Martin, Artemas, D. C., '98
Martin, Geo. H., Mass., '93
Martin, W. W., Wis., '01
Martindale, C. W., S. D., '00
Martindale, W. C., Mich., '97
Marvin, Arthur, N. Y., '98
Mason, Jas. E., N. Y., '02
Mason, Wm. A., Pa., '98
Mass. Inst. Technology, '00
Massee, J. Edman, N. Y., '96
Massey, John, Ala., '81
Masters, Ross, Ohio, '02
Matheny, F. E., Wyo., '02
Matheson, Fred. J., Eng., '01
Matlock, J. D., Ala., '98
Matthews, A. J., Ariz., '99
Maurer, G. C., Ohio, '95
Maxson, C. H., P. I., '00
Maxson, Henry M., N. J., '92
Maxwell, Guy E., Minn., '00
Maxwell, Wm. H., N Y., '92
May, Mary C., Utah, '01
Maycock, Mark M., N. Y., '96
Mayer, Anna L., Ill., '01
Mayer, Mary H., Pa., '00
Mayne, D. D., Wis., '94
Mays, Vernon G., Mich., '98
McAfee, Lowell M., Mo., '01
McAndrews, Wm., N. Y., '00
McArdle, H. W., N. D., '98
McBride, J. K., Tex., '98
McCabe, C. B., Pa., '96
McCahan, John E., Md., '91
McCarthy, Edw. C., Mich., '01
McCarthy, W. G., Wash., '02
McCartney, Livingstone, Ky., '95
McCaslin, E. E., D. C., '98
McCauley, W. H., Iowa, '02
McClain, Wm., Jr., Ohio, '01
McClelland, Mrs. N. B. S. D., '01
McClintock, O. P. M., Kan., '94
McCloskey, Margaret, N J., '01
McClung, J. S., Colo., '95
McClymonds, J. W., Cal., '99
McConathy, W. J., Ky., '96
McConnell, J. J., Iowa, '95
McConnell, J. M., Minn., '02
McCord, W. A., Iowa, '95
McCowan, S. M., Okla., '01
McCowen, Mary, Ill., '97
McCracken, S. B., Ind., '01
McCulloch, Mary C., Mo., '92
McCullough, J. F., Ill., '96
McCullough, Nathan, Fla., '01
McDaniel, C. M., Ind., '96
McDevitt, Rev. P. R., Pa., '00
McElroy, Mrs. A. C., Ore., '95
McFarland, Geo. A., N. D., '95
McFarlane, C. T., N. Y., '01
McGilvray, J. A., Va., '00
McGilvrey, J. E., Ohio, '01
McGlynn, J. J., Ill., '95
McGregor, A. G., Ind., '01
McIntire, E. E., Minn., '02
McIntire, W. W., Ohio, '95
McIntyre, Frank, Minn., '02
McIver, Chas. D., N. C., '96
McKay, J. G., Mont., '02
McKean, J. E., Ohio, '01
McKee, J. Milford, N. Y., '95
McKee, Wm. P., Ill., '99
McKenny, Chas., Wis., '97
McKerrow, Helen W., Mich., '01
McKillop, Anna, Ill., '97
McKinley, J. P., Iowa, '01
McKnight, L. A., Ind., '91
McKone, W. J., Mich., '99
McLain, J. F., N. Dak., '02
McLauchlin, A. L., Ill., '95
McLaury, John C., N. J., '01
McLean, J. Arnott, Neb., '01
McLoughlin, Edw., Ill., '99
McLouth, J. A., S. D., '01
McMahan, J. J., S. C., '99
McManus, O. J., Iowa, '01
McMillan, D. A., Mo., '99
McMillan, J. V., Ohio, '96
McMillan, Mrs. R., Ohio, '80
McMurry, Chas. A., Ill., '90
McMurry, F. M., N. Y., '95
McMurry, Mrs. L. B., Ill., '96
McNeal, Florence, Mo., '92
McNeill, I. C., Wis., '92
McVay, Herbert R., Ohio, '00
McVicar, Peter, Kan., '86
Mead, Fred. H., N. Y., '02
Mead, Wm. E., Conn., '02
Meader, Frederick D., Can., '01
Meck, Wm. H., Ohio, '00
Meek, Chas. S., Ind., '01
Meek, Jas. R., Ill., '01
Meland, E. C., Wis., '97
Meleney, C. E., N. Y., '96
Mercer Univ. Lib'y, Ga., '99
Merica, F. M., Wis., '97
Merriam, A. R., Mich., '01
Merrick, H. V., Ohio, '98
Merrifield, Webster, N.D., '95
Merrill, Chas. E., N.Y., '94
Merrill, Edwin C., N. J., '96
Merrill, Geo. A., Cal., '00
Merrill, J. A., Wis., '97
Merrill, Jenny B., N. Y., '93
Merritt, E. L., Conn., '00
Merwin, J. B., Mo., '71
Merz, Henry, Wyo., '95
Meserve, Alonzo, Mass., '95
Metcalf, Robt. C., Mass., '92
Metcalf, S. H., Wis., '02
Meyer, A. W., Iowa, '02
Meyer, F. H., Cal., '99
Miami Univ., Ohio, '95
Michener, J. H., Pa., '98
Mich. Agri. College, '02
Mich. State Nor. Coll., '00
Mickens, Chas. W., Minn., '00
Mickle, Robt. A., Ala., '95
Middleton, A., Ill., '99
Midland Coll., Kan., '99
"Midland Schools," Iowa, '02
Mighell, Ida, Ill., '02

Miles, Emily H., Colo., '98
Millard, C. N., N. Y., '02
Miller, Adelaide W., Ill., '99
Miller, C. C., Ohio, '02
Miller, C. E., Iowa, '02
Miller, Geo. I., Iowa, '96
Miller, Geo. J., Mich., '01
Miller, Geo. McA., Mo., '01
Miller, G. R., N. Y., '96
Miller, J. H., Kan., '86
Miller, John C., Minn., '98
Miller, Josephine, Ore., '02
Miller, Kelly, D. C., '98
Miller, Lucia M., Minn., '94
Miller, Newman, Ill., '00
Miller, Thos. C., W. Va., '01
Miller, W. C., W. Va., '00
Million, John W., Mo., '01
Millis, Wm. A., Ind., '96
Mills, Leida H., Kan., '95
Millspaugh, J. F., Minn., '95
Milne, John M., N. Y., '91
Milne, Wm. J., N. Y., '92
Milner, Florence, Mich., '01
Milwaukee Pub. Lib., Wis., '98
Mingins, Clara W., Mich., '00
Minneapolis Athenæum Minn., '98
Missimer, H. C., Pa., '02
Miss. A. & M. College, '02
Mitchell, B. W., Pa., '99
Mitchell, D. E., Tenn., '02
Mitchell, Isaac, Ill., '99
Mitchell, M. S., Kan., '95
Mitchell, R. W., Ohio, '00
Moldstad, John A., Wis., '97
Mohn, Carl J., S. Dak. '02
Monin, Louis C., Ill., '01
Monlux, J. B., Cal., '95
Monroe, E. S., Ind., '97
Monroe, Ethel M., Minn., '02
Monroe, Will S., Mass., '88
Mont. State Coll., Mont., '99
Monteser, Fred., N. Y., '94
Montgomery, Eudora, Ill., '97
Montgomery, H. C., Ind., '97
Montgomery, Thos., Minn., '02
Montgomery, W. S., D. C., '98
Montrose, Otis, N. Y., '96
Moon, A. W., N. J., '89
Moore, B. F., Ind., '96
Moore, Dora M., Colo., '95
Moore, E. C., Cal., '99
Moore, G. A., Iowa, '01
Moore, J. A., Ala., '01
Moore, Jennie D., Ill., '02
Moores, Carrie E., Ohio, '95
Morgan, J. H., Wash., '99
Morgan, R. T., Ill., '97
Morrill, Chas., H., Vt., '02
Morris, Harriet N., Cal., '82
Morris, John, Ky., '96
Morris, John E., Ohio, '00
Morrison, Andrew J., Pa., '81
Morrison, G. B., Mo., '99
Morrison, Henry C., N. H., '00
Morrison, Rose, Ohio, '97
Morrow, H. T., N. Y., '01
Morse, Frank L., Ill., '97
Morse, Jerome E., N. Y., '01
Morse, W. A., Mich., '01
Morss, Chas. H., Mass., '95
Morton, Frank, Cal., '99
Morton, W. M., Ill., '02
Moses, W. J. B., Minn., '02
Mosher, E. H., Cal., '99
Mossman, E. D., S. Dak., '02
Moten, Lucy E., D. C., '02
Mott, Thos. A., Ind., '96
Mt. Holyoke Coll., Mass., '02
Mountz, Silas W., Ill., '02
Mower, F. O., Cal., '99
Mowry, Wm. A., Mass., '96
Muckley, H. C., Ohio, '01
Muir, Robert T., N. Dak., '02
Mulford, A. Isabel, Mo., '96
Mulligan, Mary S., Ind., '01
Mumma, H. W., Ohio, '00
Munroe, Jas. P., Mass., '95
Murdaugh, E. D., Md., '98
Murdock, F. F., Mass., '98
Murfee, H. O., Ala., '01
Murlin, L. H., Kan., '95
Murphy, Anna M., Ill., '01
Murphy, Geo. T., Mo., '91
Murphy, Teresa M., Ill., '02
Murray, Anna, Ill., '98
Murray, May E., Mass., '99
Murray, Wm. S., Turkey, '98
Murrey, T. P., Ark., '98
Myers, Ida G., D. C., '01
Myers, Will A., Ind., '97
Myrick, H., Mass., '98
Naff, J. H., Kan., '99
Nagel, J. J., Iowa, '95
Nardin, E. C., Mich., '01
Nash, Geo. W., S. Dak., '01
Nash, Louis P., Mass., '99
Nebraska St. Nor. Sch., '02
Ne Collins, J. E., N. Y., '99
Needham, Milton J., Ariz., '00
Needham, O., Wis., '97
Nellis, Geo. W., S. Dak., '01
Nelson, A. C., Utah, '01
Nelson, Andrew, Minn., '01
Nelson, B. E., Ill., '99
Nelson, E. B., N. Y., '98
Nelson, Frank, Kan., '99
Nelson, Kate S., Wis., '96
Neville, Frank F., Minn., '02
Newberry Lib'y, Ill., '98
New Britain Inst., Conn., '02
Newell, A. C., Iowa, '01
Newell, Miss C. S., Kan., '95
Newhall, Chas. W., Minn., '02
New Hampshire St. Lib'y, '98
New Haven Pub. Lib'y, Conn., '01
N. J. State Lib'y, '01
Newkirk, C. F., Ill., '98
Newman, Emma A., N.Y., '00
N. Mex. Agri. Coll., '02
New Orleans Nor. Sch., La., '01
Newson, H. D., N. Y., '95
New York Pub. Lib'y, '99
Nichols, Chas. E., N. Y., '99
Nichols, Fred R., Ill., '93
Nichols, Walter H., Colo., '01
Nicholson, Mary E., Ind., '85
Nicholson, Thos., Iowa., '02
Nicholson, Watson, Conn., '99
Nightingale, A. F., Ill., '86
Noble, Hugh M., S. Dak., '02
Noble, O. D., Mo., '02
Noel, Alex., H. Mo., '97
Noetling, Wm., Pa., '98
Nolen, A., Eugene, Mass., '91
Nor. Sch., Dayton, O., '98
Nor. Adams Pub. Lib'y, Mass., '01
N. Dak. Ed. Assoc., '96
Nor. Ariz. Normal School, '01
N. Ill. St. Nor. Sch., '99
N. Ind. Nor. Sch. Lib'y, '97
N. St. Nor. Sch., Mich, '99
Northrop, Cyrus, Minn., '02
Northwestern Univ., Ill., '02
Norton, A. W., S. Dak., '93
Norton, R. C., Mo., '95
Norton, W. H., Iowa, '01
Norville, Josephine, Mo., '95
Noss, Theo. B., Pa., '96
Nye, Chas. H., Wis., '84
Nykirk, John B., Mich., '92
O'Brien, Mrs. Agnes, N. Y., '94
O'Brien, Katheryn A., Ill., '01
O'Brien, Theresa, Ill., '01
O'Callaghan, W. F., N.Y., '94
O'Connor, D. C., Neb., '94
O'Connor, Joseph, Cal., '88
O'Connor, Margaret A., Ohio, '02
O'dell, Malcolm W., Iowa, '01
O'Dell, Lucien B., Ind., '00
Ogg, R. A., Ind., '97
O'Grady, C. Geraldine, N. Y., '01
O'Grady, Julia, Ill., '01
Ogren, John, S. C., '00
O'Hanlon, R. J., Wis., '97
Ohio State Univ., '97
O'Keefe, Mrs. S. J., Ill., '96
Olds, Mary L., Minn., '94
Oldt, F. T., Iowa, '96
Oldt, J. C., Ohio, '01
O'Leary, J. A., Mich., '01
O'Leary, Kate S., Mass., '95
Olin, Arvin S., Kan., '90
Olivia Rainey Lib'y, N. C., '01
Olsen, John W., Minn., '00
Olson, Mrs. Mary D., Ill., '02
Omaha Pub Lib'y, Neb., '98
O'Neil, Cordelia L., Ohio, '01
O'Reilly, Mary, Ill., '02
Ormsby, F. B., Ill., '96
Osgood, Anna M., Ohio, '90
O'Shea, M. V., Wis., '92
Oswego Nor. Sch., N. Y., '00
Ott, Harvey N., Ill., '01
Outcalt, Irving E., Cal., '01
Owen, Hugh A., N. Mex., '97
Owen, Katie L., Minn., '02
Owen, Lincoln, Mass., '96
Owen, W. B., Ill., '96
Owens, C. J., S. C., '00
Packer, Anna E., Iowa, '01
Paessler, V. S., N. Y., '98
Page, Edw A., N. Y., '99
Page, Edw. C., Ill., '00
Page, R. S., Ill., '96
Painter, D. H., Minn., '01
Painter, J. E., Minn., '02
Palen, H. O., Cal., '02
Palmer, A. N., Iowa, '96
Palmer, Chas. S., Colo., '95
Palmer, E. D., Mich., '94
Palmer, Francis B., N. Y., '90
Palmer, Frank H., Mass., '01
Palmerlee, C. E., Mich., '01
Park, Andrew T., Minn., '02
Parker, Alice N., D. C., '98
Parker, Chas. I., Ill., '87
Parker, Chas. V., Colo., '87
Parker, C. M., Ill., '95
Parker, Henry M., Ohio, '95
Parker, John L., Ala., '01
Parker, M. M., Cal., '99
Parker, W. D., Wis., '84
Parker, W. N., Wis., '02
Parker, W. S., Mass., '96
Parkinson, D. B., Ill., '97
Parkinson, John B., Wis., '84
Parlin, Frank E., Mass., '01
Parmelee, L. S., Mich., '01
Parmenter, Chas. W., Mass., '95
Parrish, Celestia S., Va., '97
Parrish, Ophelia A., Mo., '01
Parry, Mrs. M. S., Minn., '02
Parson, S. F., Ill., '02
Passmore, John A. M., Pa., '92
Patten, Frank C., Mont., '97
Pattengill, Henry R., Mich., '92
Patton, Cassia, Alaska, '95
Patton, Chas. L., N. Y., '86
Paul, J. H., Utah, '02
Payne, Bertha, Ill., '02
Payne, C. E., Minn., '02
Payne, W. C., Ill., '96
Payne, Wm. H., Mich., '92
Peabody. Helen S., S. D., '01
Peacher, A. L., Ark., '96
Peacock, Mary C., Pa., '98
Peairs, H. B., Kan., '97
Peak, Chas. N., Ind., '96
Pearcy, Jas. B., Ind., '01
Pearse, C. G., Neb., '91
Pearson, F. B., Ohio, '01
Pearson, Henry, Ga., '98
Pearson, H. C., Pa., '99
Pearson, Juliet, N. Y., '99

Pearson, T. G., N. C., '00
Pease, Alvin F., Mass., '91
Pease, N. W., N. J., '94
Peaslee, John B., Ohio, '80
Peck, A. L., N. Y., '97
Ped. Lib'y, S. of Schs., Pa., '00
Pederson, B. C., S. Dak., '02
Peirce, Eugene C., Iowa, '01
Pemberton, R. N., Kan., '02
Penniman, J. H., Pa., '99
Penn. State Coll., Pa., '00
Penn. State Library, '00
Pennypacker, J. L., Pa., '00
Peoria Pub. Library, Ill., '01
Peres, I. H., Tenn., '00
Perkins Institution Mass., '97
Perkins, R. W., La., '01
Perrin, John W., Ohio, '01
Perrine, Lura L., N. D., '95
Perry, Alfred T., Ohio, '00
Perry, Elizabeth H., Mass., '91
Perry, Reuben, Wis., '01
Perry, Wm. H., Ky., '98
Peterson, Francis M.,Ala., '01
Peterson, J. P., Wis., '97
Pettis, J., Wilson, Ark., '01
Pettis, Rilla A., S. D., '01
Phelan, W. W., Miss., '98
Phelps, Wm. F., Minn., '70
Philadelphian Soc., Wis., '84
Philbrook, C. F., Ill., '95
Philips, Geo. M., Pa., '79
Philips, H. S., Colo., '99
Phillips, Daniel E., Colo., '00
Phillips, Hattie A., Iowa, '96
Phillips, J. H., Ala., '88
Phillips, Mrs. J. H., Ala., '01
Philomathean Lit. Soc.,Pa.,'98
Pickard, Josiah L., Me., '86
Pierce, Edw. T., Cal., '89
Pierce, Mrs. Ella M., R. I.,'96
Pierce, Lovick, D. C., '98
Pierce, Mary R., Ill., '97
Pierce, Thos. P., Ohio, '01
Pigg, G. L., S. D., '99
Pike, Joshua, Ill., '91
Pillsbury, W. H., Neb., '01
Pinkerton, T. B., Ohio, '99
Pippin, Mrs. E. E., Md., '00
Pitman, J. A., Mass., '99
Pittinger, O. M., Ind., '01
Place, Mrs. C. L., Minn., '96
Plapp, F. W., Ill., '97
Plimpton, Geo. A., N. Y., '94
Plumer, Geo. M., Ohio, '96
Poland, A. B., N. J., '92
Pollard, Mary O., Minn., '02
Pollock. Rosalie, Utah, '97
Pollock, Susan P., D. C., '94
Pomona Coll., Cal., '99
Port, Mary A., Wash., '02
Porter, C. W., Minn., '02
Porter, E. A. F., Ohio, '99
Porter, Edgar L., Minn., '02
Port Jervis F. Lib'y, N. Y., '99
Posse, Baroness Rose. Mass., '95
Potter, Grace T., Ill., '01
Pound, E. A., Ga., '01
Pound, J. M., Ga., '01
Powell, Arthur, Ohio, '00
Powell, W. B., N. Y., '92
Powell, W. F., D. C., '89
Power, Gussie, N. Y., '87
Powers, Jas. K., Ala., '95
Prather, Wm. L., Tex., '01
Pratt, Florence B., Ill., '02
Pratt Inst. Free Lib'y, N. Y., '01
Pratt, Martin L., Minn., '02
Pratt, R. H., Pa., '98
Pratt, W. A., Iowa, '01
Pray, Mabel L., Ohio, '97
Pray, T. B., Wis., '94
Preece, Mrs. Louise, Minn., '94
Prentice, May H., Ohio, '02
Prentis, H. W., N. Y., '97
Prentiss, Jennie W., Ohio, '01
Preston, J. R., Miss., '90
Prettyman, E. B., Md., '92
Price, H. C., Iowa, '02
Prichard, E. H., Ohio, '95
Prichard, Miss M. S., Pa., '98
Prillerman, Byrd, W. Va., '91
Prince, John T., Mass., '91
Principals' Round Table, Wilmington, Del., '01
Pritchard, M. T., Mass., '96
Pritchett Coll., Mo., '00
Pritchett, H. C., Tex., '92
Pritchett, Henry S., Mass., '02
Proudfoot, Mrs. A. H., Ill., '97
Pruitt, Elias, Ill., '02
Pub. Lib'y, Boston, Mass., '00
Pub. Lib'y, Brooklyn, N. Y., '01
Pub. Lib'y, Butte, Mont., '00
Pub. Lib'y, Detroit, Mich., '97
Pub. Lib'y, Dover, N. H., '00
Pub. Lib'y, Fitchburg, Mass., '01
Pub. Lib'y, Gail Borden, Ill., '01
Pub. Lib'y, Jersey City, N. J., '97
Pub. Lib'y, Kalamazoo, Mich., '01
Pub. Lib'y, Los Angeles, Cal., '00
Pub. Lib'y, Lynn, Mass., '00
Pub. Lib'y, Malden, Mass., '00
Pub. Lib'y, Manchester, England, '02
Pub. Lib'y, New Bedford, Mass., '01
Pub.Lib'y,New Haven, Conn., '01
Pub. Lib'y, New York, N. Y., '99
Pub. Lib'y, North Adams, Mass., '01
Pub. Lib'y, Peoria, Ill., '01
Pub. Lib'y, Philadelphia, Pa., '97
Pub. Lib'y, Rockford, Ill., '99
Pub. Lib'y, St. Joseph, Mo.,'00
Pub. Lib'y, St. Louis, Mo., '90
Pub. Lib'y, St. Paul, Minn.,'01
Pub. Lib'y, Salem, Mass., '00
Pub. Lib'y, San Francisco, Cal., '97
Pub. Lib'y, Seattle, Wash.,'01
Pub. Lib'y, Somerville, Mass., '00
Pub. Lib., Taunton, Mass., '02
Pub. Lib'y, Topeka, Kan., '00
Pub. Lib'y, Trenton, N. J., '01
Pub. Lib'y, Wheeling, W. Va., '01
Pub. Lib'y, Worcester, Mass., '98
Pub. Sch. Teachers, Wis., '84
Pugh, Jas. H., Ill., '98
Pulsifer, Wm. E., N. Y., '99
Purer, Mary I., Ill., '96
Puryear, Florence, Tenn., '01
Puryear, Mary C., Tenn., '01
Putnam, Mrs. Alice H., Ill., '93
Putnam, Richard R., Mich.,'01
Putney, Chas. G., Mich., '01
Queens Borough Lib., N.Y.,'01
Quello, Anton, Minn., '02
Quick, Geo. F., Ind., '01
Race, S. J., Minn., '95
Raines, S. E., Ill., '01
Rakestraw, Chas. D., D. C.,'99
Ramer, M. M., S. Dak., '02
Ramsay, Chas. C., Mass., '93
Ramsey, Geo. J., Tenn., '89
Ramsey, Mary C., Wyo., '01
Randall, J. E., Ohio, '98
Ranger, W. E., Vt., '99
Rankin, A. W., Minn., '93
Ransom, Frances E.,N. Y., '99
Rapp, Christian F., Ohio, '99
Rapp, Eli M., Pa., '97
Raschig, H. H., Ohio, '93
Rathman, C. G., Mo., '01
Raub, A. N., Del., '92
Ravenhill, Alice, England, '01
Rawson, E. B., N. Y., '99
Rawson, Guy L., Iowa, '02
Rayman, R. E., Ohio, '95
Raymond, A. V. V., N. Y., '95
Read, J. Irving, Cal., '98
Redman, Elmer S., N. Y., '00
Redway, J. W., N. Y., '00
Reed, A. A., Neb., '95
Reed, Grace, Ill., '02
Reeder, W. C., Ohio, '98
Reel, Estelle, Wyo., '94
Rees, Minnie E., Cal., '99
Reeves, C. F., Wash., '96
Reid, Jas., Mont., '95
Reigart, J. F., N. Y., '99
Reiley, Cynthia E., Mont., '95
Reinhart, J. Albert, N. J., '94
Remington, L. D., Mich., '96
Rennick, Louise D., Ill., '97
Rennie, Robert H., Ill., '97
Requa, M. Augusta, N. Y., '99
Ressler, Edwin D., Ore., '92
Reverley, Ellen G., Ohio, '91
Reynolds, Chas. B., Mo., '95
Reynolds, J. H., Ark., '97
Reynolds, Mary E., Ill., '02
Rhoads, McHenry, Ky., '91
Rhode Island Nor. Sch., '97
Rice, Emily A., N. J., '92
Rice, Gratia L., N. Y., '89
Rice, J. M., N. J., '95
Rice, Wm. N., Conn., '99
Rich, Isaac P., Wash., '02
Richards, A. W., N. Y., '02
Richards, C. O., N. Y., '02
Richards, C. R., N. Y., '98
Richards, D. M., N. M., '01
Richards, Mrs. E. H., Mass., '98
Richards, Mrs. L. A., N. Mex., '01
Richardson, B. C., Me., '01
Richardson, Kate S., Wis., '01
Richeson, J., Ill., '97
Richmond, Sarah E., Md., '76
Riddle, W., Pa., '96
Ridgeway, Wm. C., Mo., '98
Rightsell, J. R., Ark., '98
Rigler, Frank, Ore., '98
Riley Co. Ed. Asso, Kan., '86
Riley, Mrs. M. E., Mo., '90
Ripon College, Wis., '02
Riste, Ernest, Wash., '99
Riste, W. G., Kan., '97
Ritchie, Ada M., Ohio, '01
Rivers, W. W., Ark., '95
Roach, T. W., Kan., '86
Robbins, Carolyn M., Minn.,'02
Robbins, C. W., Mo., '92
Robbins, Geo. A., Ill., '97
Robert, Jas. A., Ohio, '82
Roberts, Dimon H., Mich., '98
Roberts, Edw. D., Ohio, '00
Roberts, Flora, Ind., '96
Roberts, Geo. L., Ind., '01
Roberts, Henry H., Iowa, '02
Roberts, Hester A., N. Y., '94
Roberts, H. L., Ill., '97
Roberts, L. D., Wis., '97
Roberts, Wm. E., Ohio, '98
Robertson, Alice M., Ind. Ter. '02
Robertson, J. L., Ill., '97
Roberston, P. W., D. C., '96
Robinson, Albert R., Ill., '95
Robinson, E. V., Minn., '02
Robinson, Lucy W., Va., '90
Robinson, Oscar D., N. Y., '92
Robinson, W. S., Ohio, '95
Robson, Mary, Ill., '02
Rocheleau, W. F., Ill., '96

Rochford, Anna T., Ill., '01
Rockwood, Geo. H., Ill., '00
Rogers, A. C., Minn., '99
Rogers, Dora B., W.Va., '99
Rogers, Howard J., N. Y., '96
Rogers, J. N , Ga., '97
Rogers, Josephine E., N. Y., '93
Rogers, Rovillus R., N. Y., '95
Roller, F. J., Ohio, '98
Roop, C. Y., Cal., '86
Root, Chas. C., Neb., '01
Rose, Geo. E., Kan., '86
Rose, S. L., Ohio, '96
Ross, M. M., W. Va., '99
Ross, Pete W., Minn., '99
Rosseter, E. C., Ill., '00
Roth, Anna C., Ky., '97
Rothe, Ella A., Ohio, '00
Row, R. K., Ill., '99
Rowe, Ella A., Ill., '01
Rowe, H. M., Md., '96
Rowe, Stuart H., Conn., '98
Rowe, W. S., Ind., '95
Rowland, J. H., Ohio, '96
Rudolph, Ida, Ky., '96
Runyon, Laura L., Ill., '01
Russell, Jas. E., N. Y., '95
Russell, Walter E., Me., '01
Russell, W. P., Ill., '99
Rust, Fred W., Ill., '01
Ryan, Mary E., Mont., '99
Ryan, W. C., Mo., '02
Ryon, C. M . N Y., '96
Saben, Alfred S., Mass., '01
Sabin, Albert R., Ill., '84
Sabin, Ellen C., Wis., '95
Sabin, Henry, Iowa, '89
Sage, A. H., Wis., '98
Sage, W. V., Mich., '96
St. Clair, W. T., Ky., '01
St. John, Geo. E., Wash., '01
St. Louis Pub. Lib'y, Mo., '00
St. Louis Univ., Mo , '01
St. Paul Pub. Lib'y, Minn.,'01
Salem Pub. Lib'y, Mass., '00
Salisbury, Albert, Wis., '87
Samuel, Wm. H., Pa., '93
Sanders, Alan, Ohio, '01
Sanders, F. W., Germany, '97
Sandison, Howard, Ind., '96
Sanford, Fernando, Cal., '97
Sanford, Frank E., Ill., '01
Sanford, Henry R., N Y., '95
Sanor, S. D., Ohio, '93
Sargent, Dudley A., Mass.,'96
Sargent, Elisa A., Mass., '96
Sargent, Sabra L., Ill., '02
Sarver, J. M., Ohio, '98
Saunders, Sara A., N. Y., '96
Savitz, J. J., N. J., '99
Sawhill, Thos. A., Kan., '86
Sawvel, Franklin B., Pa., '94
Sawyer, C. L., Minn., '97
Saylor, J. F., Wash., '96
Scarlett, Augustus, N. J., '91
Schaeffer, Nathan C., Pa., '87
Schauffler, Alfred T., N. Y.,'95
Schell, Henry S., Ind., '02
Schellenger, G. J., S. D., '01
Schiller, J. D., Mich., '96
Schmidt, C. C., N. Dak., '02
Schmidt, F. A., N. Y., '96
Schmidt, Hans. W., Minn., '02
Schmucker, S. C., Pa., '92
Schneider, Henry G., N. Y.,'95
Schobinger, J. J., Ill., '99
Schofield Martha, S. C., '91
Scholfield, Bessie M., R. I., '96
Sch.of Agri.,Univ. of Minn., '02
Sch. of Ed., Univ. of Chicago, Ill., '99
Sch. of Ped., N. Y. Univ., N. Y., '99
Schreiber, Mae E., N. Y., '96
Schryver, Anna A., Mich., 96
Schulz, C. G., Minn., '02
Schurman, J. G., N. Y., '96
Schuyler, Aaron, Kan., '86
Schuyler, E. H., N. J., '94
Schuyler, Wm., Mo., '01
Schwietert, H. J., Iowa, '01
Scotia Seminary, N. C., '99
Scott, Chas. B., P. R., '90
Scott, Colin A., Colo., '01
Scott, Edith A., N. Y., '99
Scott, E. H., Ill., '95
Scott, F. N., Mich., '97
Scott, Harriet M., Cal., '96
Scott, Izora, Colo., '97
Scott, J. B., Ill., '99
Scott, Jas. W., Colo., '93
Scott, O. C., Ill., '95
Scott, W H., Ohio, '93
Scovel, E. C., S. Dak., '01
Scovel, Sylvester F., Ohio, '97
Scoville Inst., Ill., '00
Scranton Pub. Lib'y, Pa., '99
Scribner, E. E., Mich., '01
Scudder. Myron T., N. Y., '95
Scull, Jas. F., Ind., '95
Searle, F. E., Mich., '99
Searle, Miss S. M., N. J., '93
Searson, J. W., Neb., '02
Seattle Pub. Lib'y, Wash., '01
Seaver, Edwin P., Mass., '93
Sedgwick, Wm. T., Mass., '99
Seeley, Levi, N. J., '90
Seerley, H. H. Iowa '89
Selleck, W. F. F., Minn., '98
Selvig, C. G., Minn., '02
Senger, Harry L., Ohio, '01
Sexton, E. K., N. J., '97
Seymour, A. H., S. Dak., '02
Seymour, R. B., Ill., '00
Shafer, Harry M., Cal., '01
Shanahan, Rev. J. W., Pa., '95
Shanley, May C., S. Dak., '02
Sharkey, J. P., Ohio, '90
Sharp, Frank C., Wis., '02
Shaver, Chas. A., N. Y., '00
Shaw, A. L., Neb., '97
Shaw, Edw. R., N. Y., '93
Show, Samuel, Wis., '84
Shawan, J. A., Ohio, '94
Sheaffer, W. A., Iowa, '02
Sheakley, S. H., Iowa, '00
Shear, S. R., N. Y., '95
Shearer, W. J., N. J., '95
Shearer, W. S., Ill., '97
Sheats, W. N., Fla., '93
Sheldon, E. H., Ill., '02
Shelley, Kate, Mont., '01
Shelton, Chas., E., Iowa, '00
Shelton, F. M., Ohio, '99
Shepard, Elmer I., Minn., '00
Shepard, Geo. C., Va., '97
Shepard, Irwin, Minn., '83
Sheppard, L. W., Ohio, '98
Sherer, Albert H., Ohio, '00
Sherman, Chas. M., Wash.,'01
Sherrick, J. R., Wis., '02
Sherwood, Mrs. J. C., Cal.,'99
Sherwood,MarthaA.,Mich.,'01
Shield, W. B., Mo., '01
Shiff, Hannah, Ill., '02
Shippen, Edw., Pa., '79
Shirk, David F., Kan., '95
Shoemaker, W. A., Minn., '95
Sholes, Josephine S., Pa., '02
Shoop, John D., Ill., '00
Shorkley, Mrs. H. B., Cal., '99
Shotwell,Ambrose M.,Mich.,'01
Shotwell, J. B., Ohio, '01
Showers, F. F., Wis., '99
Shultess, Alice H., Wis., '00
Shumaker, F. P., Ohio, '99
Shutt, Robt. D., Mich., '02
Shutts, Geo. C., Wis., '96
Sibley, Chas. A., Mass., '95
Siders, Walter R., Idaho, '01
Siefert, H. O. R., Wis., '95
Silke, Lucy S., Ill., '93
Silver, Edgar O., N. Y., '94
Silver, Elmer E., Mass., '99
Silver, Ernest L., N. H., '02
Simerwell, E. A., Kan., '95
Simmons, J. W., Mich., '99
Simonds, H. A., Wis., '95
Simonson, R. B. D., Mo., '00
Sims, J. F., Wis., '97
Sinclair, S. B., Can., '91
Singer, Edgar A., Pa., '80
Sites, C. M. Lacey, China, '02
Skidmore, Sydney T., Pa., '95
Skinner, Chas. R., N. Y., '90
Skinner, E., Colo., '99
Skinner, Wm. C., Mich., '95
Slack, H. W., Minn., '97
Slaton, W. F., Ga., '97
Slaton, W. M., Ga., '94
Slauson, H. M., Mich., '94
Sloane, Clyde, Ill., '98
Slocum, Charlotte M., Ill., '02
Smalley, D. H., Ill., '99
Smallwood, Mabel E., Ill., '96
Smedley, C. E., Colo., '02
Smedley, Eva A., Ill., '97
Smiley, Elmer E., Wyo., '00
Smiley, Wm. H., Colo., '92
Smith, A. D., Minn., '02
Smith, A. J., Minn., '02
Smith, Alex., Ill., '99
Smith, Anna T., D. C., '95
Smith, Arthur M., Hawaii, '01
Smith, Arthur P., Mass., '90
Smith, A. Thos., Pa., '93
Smith, Carlton W., Wis., '02
Smith, Mrs. C. B., Ill., '98
Smith, Chas. A., Minn., '02
Smith College, Mass., '98
Smith, D. E., N. Y., '01
Smith, E. E., Ill., '96
Smith, E. R., Ill., '97
Smith, E. S., Ill., '01
Smith, Euler B., Ga., '87
Smith, F. Everett, S. D., '01
Smith, F. P., Kan., '97
Smith, Frank, Mich., '01
Smith, Geo. M., S. D., '95
Smith, Harriet E., Wis., '97
Smith, Henry B., Colo., '99
Smith, H. J., N. Y., '95
Smith , Irving B., N. Y., '99
Smith, J. F., Ohio, '98
Smith, J. L., Ill., '00
Smith, J. Mace, N. Y., '95
Smith, Jos. R., Pa., '99
Smith, M. B., Mass., '99
Smith, Robt. M., Ill., '02
Smith, Sidney F., D. C., '95
Smith, Simon W., Minn., '02
Smith, W. C., Minn., '02
Smith, Wm. C., Ind., '01
Smyser, Selden F., Minn., '02
Smyth, W. S., Ill., '95
Snedden, D. S., Cal., '99
Snow, Bonnie E., Minn., '96
Snow, Francis H., Kan., '93
Snow, Mary S., N. Y., '98
Snyder, A. J., Ill., '97
Snyder, Henry, N. J., '94
Snyder, Jessie M., Ga., '97
Snyder, J. H., Ohio, '96
Snyder, J. L., Mich., '89
Snyder, W. H., Mass., '01
Snyder, W. R., Ind., '95
Snyder, Z. X., Colo., '87
Snyder, Mrs.Z.X., Colo., '96
Soldan, F. Louis, Mo., '77
Sollitt, Alice E., Ill., '93
Somerville Pub. Lib., Mass.,'00
Soper, Laura J., Mich., '01
Soulé, Geo., La., '92
Soule, O. M., Ohio, '01
South Carolina College, '02
S. Dak. Agri. College, '99
S. Ill. Nor. University, '99
Southall, J. W., Va., '98
Spain, Chas. L., Mich., '01
Spangler, H. T., Pa., '94

Spalding, J. Lancaster, Ill., '02
Spaulding, F. E., N. J., '96
Spaulding, Randall, N. J., '92
Spayd, H. H., Pa., '92
Speer, W. W., Ill., '96
Spencer, Pauline W., Pa., '93
Spencer, Robt. C., Wis., '84
Spencer,Mrs.Sara A.,D.C., '92
Spencer, Thos. E., Mo., '00
Spero, Mrs. Anna K., Cal., '77
Spiegle, Grace E., Pa., '99
Spindler, J. W., Kan., '99
Springer, Durand W.,Mich.,'94
Squier, Mary P., Ill., '02
Squire, Mary V., N. Y., '96
Stableton, J. K., Ill., '00
Stalker, Francis M., Ind., '01
Stanley, Edmund, Kan., '86
Stanley, Kate, Mass., '02
Staples, Helen F., Minn., '96
Stapleton, M. A. C., Mont.,'99
Starbuck, Edwin D., Cal., '99
Stark, Joshua, Wis., '84
Starke, N. C., Va., '99
St.F.N.Sch.,Farmville,Va.,'99
State Agr. College, Kan., '97
St. Bd. of Education, Mont.,02
St. Historical Soc., Wis., '84
State Library, Cal.. '99
State Library, Mass., '98
State Library, Mich., '02
State Lib'y, New Jersey, '01
State Library, Pa., '01
State Nor. College, Ala., '01
State Nor. College, Mich., '00
St.N.& Ind. Coll., N. C., '98
St.N.Sch.,Brockport,N.Y., '00
St.N.Sch.,California,Pa.,'99
St.N.Sch.,Carbondale, Ill.,'99
St.N.Sch.,Cedar Falls, Ia.,'97
St.N.Sch.,Charleston, Ill.,'99
St. N. Sch., Chico, Cal., '97
St. N. Sch., De Kalb, Ill., '99
St. N. Sch., Ellensburg, Wash., '97
St. N. Sch., Fairmont, W. Va., '01
St.N.Sch.,Farmville,Va.,'99
St. N. Sch., Fitchburg, Mass., '98
St. N. Sch., Flagstaff, Ariz.,'01
St. N. Sch., Greeley, Colo., '97
St. N. Sch., Indiana, Pa., '99
St. N. Sch., Jacksonville, Ala., '99
St. N. Sch., Los Angeles, Cal., '97
St. N. Sch., Macomb, Ill., '02
St. N. Sch., Mankato, Minn., '99
St. N. Sch. Mansfield Pa., '97
St. N. Sch., Marquette, Mich., '99
St. N. Sch., Mayville, N. D.,'00
St. N. Sch., Millersville, Pa.,'97
St. N. Sch., Monmouth,Ore.,'01
St. N.Sch.,Moorhead,Minn.,'97
St. N. Sch., New Paltz, N. Y., '99
St. N. Sch., Norman, Ill., '98
St. N. Sch., Oshkosh, Wis.,'98
St. N. Sch., Oswego, N. Y.,'00
St. N. Sch., Peru, Neb., '02
St. N. Sch., Platteville, Wis.,'84
St. N. Sch., Providence, R. I., '97
St. N. Sch., Salem, Mass., 00
St. N. Sch., San José, Cal., '98
St. N. Sch., St. Cloud, Minn., '97
St. N. Sch., Superior, Wis., '00
St. N. Sch., Tempe, Ariz., '01
St. N. Sch., Terre Haute, Ind., '97
St. N. Sch., Trenton, N. J., '97
St. N. Sch., Westfield, Mass., '97
St. N. Sch., W. Liberty, W. Va., '00
St. N. Sch., Whatcom, Wash., '00
St. N. Sch., Whitewater, Wis., '98
St. N. Sch., Winona, Minn.,'97
St. Teachers' Assoc. of Ill., '90
St. Univ. Lib'y, Iowa, '97
St. Univ. Lib'y, Ohio, '97
Stearns, J. W., Wis., '84
Steele, Wm. L., Ill., '90
Steelman, D. T., N. J., '02
Steen, J. M., Tenn., '00
Steere, E. A., Mont., '96
Stehman, J. H., Ill., '97
Stein, F. W., Cal., '99
Stephens, H. Morse, Cal., '96
Stephens, J. P., Pa., '01
Stephens, M. Bates, Md., '98
Stephenson, Lillie S., Ill., '95
Sterling, W. D., Mich., '02
Stern, Menco, N. Y., '82
Stetson, W. W., Me., '95
Stevens, C. E., Ohio, '01
Stevens, Chas. E., Mass., '02
Stevens, Chas. M., Minn., '02
Stevens, Edw. L., N. Y., '99
Stevens, Moses C., Ind., '76
Stevens, Plowden, Jr., N. Y., '95
Stevens, W. M., Iowa, '02
Stevenson, A. L., Ill., '97
Stevenson, Haviland, N. Y.,'01
Stevenson, Wm. C., Md., '90
Steward, Darius, Minn., '00
Stewart, I. N., Wis., '84
Stewart, John A., Mich., '84
Stewart, Jos. S., Ga., '95
Stewart, N. Coe, Ohio, '92
Stewart, Sarah A., N. Y., '84
Steyer, A. M., S. Dak., '02
Stickney, Lucia, Ohio, '93
Stigall, Oliver, Mo., '98
Stilwell, Miss E. O., S. D., '01
Stitt, E. W., N. Y., '96
Stockman,Wm. H., N.Y., '01
Stockwell,Mrs.H.H.,N.D., '94
Stockwell, Thos. B., R. I., '91
Stockwell,Walter L.,N.D.., '94
Stoddard, Miss C. W., N. Y.,'02
Stokes, A. L., S. C., '00
Stokes, Horace A., Ohio, '95
Stokes, Susan G., Utah, '99
Stone, Mason S., P. I., '94
Stoner, W. H., Iowa, '02
Stoneroad, Rebecca D., D. C., '96
Storm, A. V., Iowa, '94
Stout, Geo. H., Pa., '84
Stout, Isaac H., N. Y., '90
Stout, J. D., Wash., '98
Stovall, Anna M., Cal., '99
Stowell, Thos. B., N. Y., '91
Strachan, Alex., S. D., '97
Stratton, C. C., Ore., '88
Stratton, F. E., Minn., '86
Straubenmüller, G., N. Y., '97
Strickland, W. S., Ohio, '99
Strine, J. H., Cal., '99
Stroeter, E. H., Mo., '99
Strong, Edwin A., Mich., '92
Strong, Frank, Kan., '02
Strong, Jas. W., Minn., '95
Struthers, Hester C., N.C., '98
Stuart, Alex. T., D. C., '00
Stuart, Margaret, Ill., '01
Stuart, Giles A., Conn., '99
Stuart, Milo H., Ind., '02
Stubbs, J. E., Nev., '95
Study, J. N., Ind., '97
Stuver, E., Colo., '95
Sudborough, Mrs. G., Neb., '80
Sullivan, Ella C., Ill., '99
Suman, Geo. W., Ind., '01
Summers, Alex., D. C., '98
Super, Chas. W., Ohio, '91
Superior St. Nor. Sch., Wis.,'00
Suplee, Etta, Iowa, '95
Suplee, Fannie, Iowa, '95
Supt. and Prin. Asso., Wis.,'84
Surette Thos. W., N. Y., '01
Suter, Anna, Ind., '90
Suter, Miss H. A., La., '94
Sutherland, E. B., Mich., '01
Sutherland, Marg. W., Ohio, '95
Sutton, W. S., Tex., '95
Suydam, V. A., Wis., '99
Swain, G. R., Mich., '01
Swain, Joseph, Pa., '93
Swan, Phebe, Wis., '97
Swanger, F. A., Cal., '99
Swart, Rose C., Wis., '95
Swartz, Jno. W., Ohio, '99
Sweeney, Ella L., R. I., '00
Sweet, Benj. A., Ill., '00
Swett, Harry P., Conn.,'02
Swett, John, Cal., '99
Swingle, W. M., N. J., '98
Syracuse Pub. Lib., N.Y., '98
Tadd, J., Liberty, Pa., '92
Tait, Elizabeth S., Pa., '98
Talbot, Henry, Ill., '92
Tapley, Wm. W., Mass., '92
Taplin, Mrs. J. E., S. Dak.,'02
Tappan, David S., Ohio, '99
Tapper, Thos., Mass., '02
Tarbell, Horace S., R. I., '91
Tarr, Ralph S., N. Y., '99
Tate, W. K., S. C., '99
Taunton Pub.Library,Mass.'02
Tawney, Guy A., Wis., '98
Taylor, A. R., Ill., '86
Taylor, Daniel P., Colo., '01
Taylor, Edw., Ky., '96
Taylor, G. Warren, Ill., '00
Taylor, Jos. S., N. Y., '94
Taylor, R. A., N. Y., '01
Teachers' Asso., Cowley Co., Kan., '86
Teachers' Asso., Riley Co., Kan., '86
Teachers' Asso., Wis., '84
Teachers' College, Dept. Man. Tr., N. Y., '99
Teachers' Inst., Phila., Pa., '79
Teeter, John D., Fla., '01
Templeton, J. C., Cal., '94
Tennerry, Florence E., Ill., '02
Tennerry, Kate E., Ill., '02
Terman, John W., Ind., '99
Terrel, Harriet E., Ohio, '96
Terrell, Robert H., D. C., '98
Thaler, Jos. A., Mont., '02
Thames, W. I., Miss., '97
Tharpe, F. D., Mo., '91
Thatcher, Jas. L., Iowa, '96
Thayer, Ada F., N. Y., '96
Theilman, Louis, Mo., '95
Thiry, J. H., N. Y., '97
Thomas, D. W., Ind., '96
Thomas, Emma A., Mich., '96
Thomas, E. R., Minn., '02
Thomas, Geo. S., N. Dak., '02
Thomas, Isaac, Vt., '99
Thomas, Jennie L., Mich., '00
Thomas, Richard S., N. Y., '01
Thomas, W. Scott, N. Y., '99
Thompson, A. B., Ind., '01
Thompson, D. M., N. C., '98
Thompson, E. C., Mich., '94
Thompson, Miss F. E.,Ohio,'99
Thompson, H. E., Okla., '95
Thompson, J. H., Mich., '01
Thompson, John G., Mass., '95
Thompson, L. S., N. J., '76
Thompson, O. D., Mich., '96
Thompson, T. E., Mass., '97
Thompson. Wm. O., Ohio, '94
Thomson, Frank D., Ill., '95
Thornburg, Z. C., Iowa, '01
Thorndyke, E. L., N. Y., '98
Thornhill, E. A., Ill., '01

Thorson, I. A., Minn., '98
Thudium, C. C., Mo., '98
Thurber, Chas. H., Mass., '93
Thweatt, Hiram H., Ga., '00
Thwing, Chas. F., Ohio, '95
Thwing, F. F., Ky., '01
Tibbets, Anna, Neb., '94
Tibbetts, A. C., Minn., '95
Tibbits, H. S., Ill., '00
Tighe, R. J., N. C., '00
Tillotson, D. C., Kan., '86
Tilton, Chas. S., Wash., '99
Tinker, B. W., Conn., '97
Tobin, Mary E., Ill., '01
Todd, Samuel B., Wis. '95
Toepel, Theo., Ga., '01
Tolman, Henry, L., Ill., '97
Tomlin, J. H., Ind., '00
Tompkins, A., Ill., '96
Tonning, P. C., Minn., '02
Tormey, J. A., Minn., '97
Torreyson, B. W., Ark., '02
Tower, Belle M., Mich., '97
Tower, Willis E., Ill., '02
Towne, Geo. L., Neb., '00
Townsend, H. S., P. I., '99
Townsend, J A., N. Y., '99
Tracy, Franklin N., Ill., '96
Trant, Amelia E , N. Y., '96
Trask, Helen W., Minn., '02
Trask, H. M., Pa., '95
Travell, Ira W., N. J., '97
Travis, Clyde R., N. Dak., '02
Travis, Mrs. Meta G., Tenn. 02
Trent, E. O., Ark., '01
Tressler, A. W., Wis., '92
Treudley, F., Ohio, '91
Triplet, Wm., Colo., '01
Tripp, John B., S. Dak., '02
Trisler, J. L., Ohio, '01
Trowbridge, G. S., Cal., '99
Truman, Emma L., S. D., '01
Trybom, J. H., Mich., '00
Tual. Acad. Pacif. Univ., Ore., '99
Tucker, D. W., Ind., '02
Tucker, Lucy B., Ohio, '01
Tuger, Margaret E., N. Y., '01
*Turner, Alfred, Mass., '95
Turner, C. W., Neb., '99
Turner, Eugene F., Tenn. '00
Turner, F. L., Ill., '00
Turner, J. E., Ill., '95
Turner, J. M., Wis., '97
Tuttle, Albert H., Va., '96
Tutwiler, Julia S., Ala., '82
Twichell, W. S., N. J., '01
Twiggs, T. P., Mich., '01
Twining, Nathan C., Ill., '84
Twiss, Geo. R., Ohio, '94
Twitchell, W. I., Conn., '01
Twitmyer, Edwin, Wash., '02
Twitmyer, Geo. W., Del., '90
Tynan, T. T., Wyo., '99
Ulrich, Jessie E., Ill., '02
Underhill, Volney, Ill., '93
University, Atlanta, Ga., '95
University, Brown, R. I., '01
University, Colgate, N. Y., '02
University,Columbia,N.Y.' 95
University, Cornell, N. Y., '96
University, Denison, Ohio, '00
University,Harvard,Mass., 95
University, J. B. Stetson, Fla., '99
University, Johns Hopkins, Md., '99
University, Lawrence, Wis., '99
University, Lehigh, Pa., '99
University, Leland Stanford Jr., Cal., '97
University, Mercer, Ga., '99
University, Miami, Ohio, '95
University, Northwestern,Ill., '02
University of Arizona, '01
University of Arkansas, '01
University of California, '95
University of Chicago, Ill., '99
University of Georgia, '95
University of Illinois, '99
University of Indiana, '99
University of Iowa, '97
University of Michigan, '98
University of Minnesota, '00
University of Missouri, '95
University of Nebraska, '98
University of N. Carolina, '99
University of N. Dakota, '99
University of Ohio, '97
University of Oklahoma, '99
University of Pennsylvania,'98
University of Rochester, N. Y., '01
University of State of N. Y., '93
University of Tennessee, '01
University of Texas, '98
University of Utah, '95
University of Vermont, '01
University of Washington, '98
University of W. Virginia, '99
University of Wyoming, '97
University, S. Ill., Nor., '99
University, St. Louis, Mo., '01
University, Vanderbilt, Tenn., '01
University, Washington and Lee, Va., '01
University, Yale, Lib'y, Conn., '01
Updegraff, H., Md., '99
Upton, R. R., Ill., '98
Vail, Henry H., N. Y., '97
Vaile, E. O., Ill., '95
Valparaiso Coll., Ind., '97
Van Adestine, Eliz., Mich., '01
Van Aken, Mrs. G., N. Y., '84
Vance, Sophie, Ohio, '90
Vance, Wm. McK., Ohio, '00
Van Cleve, C. L., Ohio, '96
Van Cleve, Edw. M., Ohio, '97
Vanderbilt Univ., Tenn., '01
Vandyke, J. A., Minn., '96
Van Fredenberg, Elmer D., Minn., '02
Van Liew, Chas. C., Cal., '94
Van Matre, Chas. A., Ind., '00
Van Rensselaer, Martha, N. Y., '94
Van Sickle, Jas. H., Md., '92
Van Wagenen, Maude L., S. Dak., '02
Van Winkle, J. D., Ark., '00
Vassar College, N. Y., '98
Vaughan, Mary E., Ill., '00
Veatch, Nathan T., Kan., '95
Veenfliet, Mrs. M. L., Mich.,'01
Venable, Mary A., Ohio, '02
Vert, Edmund J., Wis., '95
Viebahn, Chas. F., Wis., '84
Vincent, Geo. E., Ill., '02
Virtue, G. O., Minn., '98
Vogel, Wm. H., Ohio, '90
Volland, A. J., Mich., '97
Voorhes, O. P., Ohio, '00
Voorhis, Geo. H., N. J., '93
Vosburgh, J. H., Okla., '01
Wabash College, Ind., '95
Wade, Margaret I., N. J., '94
Wadhams, John A., Ill., '01
Wagner, W. H., Neb., '99
Waite, Geo. S., Mich., '00
Wakeman, J. W., N. J., '92
Waldo, Eveline A., La., '96
Walke, Matilda L., Ohio, '92
Walker, B. M., Miss., '99
Walker, E. W., Wis., '97
Walker, H. A. C., S. C., '00
Walker, J. Henry, Ga., '01
Walker, P. R., Ill., '90
Walker, R. E., Ill., '99
Wallace, Chas. L., N. H., '02
Wallace, May B., Ill., '02
Walls, Callie K., Ky., '01
Walrath, M. H., N. Y., '96
Walsh, Miss E. B., Ky., '00
Walsh, J. H., N. Y., '95
Walter, Mary, Ohio, '98
Walter, Sarah J., Conn., '98
Walters, Wm. W., Mo., '01
Walton, Geo. A., Mass., '92
Ward, F. D., Ohio, '01
Ward Seminary, Tenn., '99
Wardlaw, P., S. C., '00
Ware, N. E., Ga., '96
Warfield, Wm. C., Ohio, '00
Waring, J. H. N., D. C., '98
Warner, A. B., Wash., '94
Warner, Chas. F., Mass., '99
Warr, J. W., Ill., '95
Warriner, E. C., Mich., '99
Warters, Wm. J., Canada, '02
Washburn, Kirk N., Mass., '96
Washburn, Morgan, N. Y., '02
Washburne, Marion F.,Ind.,'00
Washington and Lee Univ., Va., '01
Waterhouse, A. H., Neb., '96
Waterman, Richard, Ill., '96
Waters, Wm. W., Neb., '02
Watson, Edith M., Mich., '97
Watson, Lake G., Ohio, '02
Watt, W. E., Ill., '95
Way, R. B., Mich., '01
Waynesburg College, Pa., '02
Weaver, E. W., N. Y., '97
Weaver, John S., Ohio, '99
Weaver, Sterrie A., Mass., '00
Webb, A. C., Tenn., '01
Webb, J. E., Iowa, '02
Webb, Louis K., Cal., '99
Weber, A. W., Wis., '97
Weber, H. C., Tenn., '97
Webster, E. E., Ill., '99
Webster, Geo. W., Ill., '99
Webster, R. H., Cal., '99
Webster, W. F., Minn., '96
Weeks, C. W., Minn., '95
Weir, Samuel, Pa., '01
Welch, W. W., Mont., '01
Weld, Frank A., Minn., '95
Weldon, Edward, Pa., '98
Welles, Frank E., N. Y., '96
Wellesley College, Mass., '00
Welsh, J. P., Pa., '96
Wentz, Etta L., N. Y., '96
Wernick, E. V., Wis., '95
Wertz, Adda P., Ill., '01
Wescott, F. H., Ill., '97
West, Geo. A., N. J., '01
West, Max, N. Y., '01
Westcott, O. S., Ill., '95
W. Ill. St. Nor. School, '02
Western, The, Ohio, '99
Westervelt, Z. F., N. Y., '97
West Virginia Univ., '99
Wettle, J. V., Mo., '01
Wetzell, W. A., Utah, '02
Whatcom Nor Sch., Wash.,'00
Wheaton Coll., Ill., '99
Wheeler, Benj. Ide, Cal., '02
Wheeler, Clara, Mich., '02
Wheeler, Henry N., Mass., '92
Wheeler, Willard J., Ala., '00
Wheeling Pub. Lib'y, W. Va., '01
Wheelock, Chas.F.,N.Y., '95
Whipple, H. A., Wis., '97
Whitcher, Geo. H., N. H., '02
Whitcomb, A. K., Mass., '92
White, Adeline R., Mont., '01
White, Chas. G., Mich., '95
White, Chas. L., Me., '91
White, Daniel A., Ill., '95
White, Daniel H., Cal., '99
**White, Emerson E.*, Ohio, '70
White, Fred. C., N. Y., '99
White, H. C., Ga., '96
White, J. T., Md., '98
White, J. U., Mo., '87

White, Wm. M., Ohio, '96
White, W. S., Mich., '97
White, W. T., Tenn., '89
Whiteford, J. A., Mo., '95
Whitfield, H. L., Miss., '00
Whitford, Wm. C., Wis., '84
Whitman College, Wash., '01
Whitney, Allen S., Mich., '94
Whitney, M. A., Ill., '91
Whitney, O. C., Wash., '98
Whitney, S. Emory, Mich., '93
Whittemore, Henry, Mass., '95
Whittle, W. R., R. I., '96
Wiard, Mrs. G. Cal., '02
Wiard, Louise A., Ky., '96
Wicks, Arthur H., Ohio, '00
Wicks, John F., Ill., '97
Wicks, Walter J., Wis., '01
Widner, Esther A., Ohio, '80
Wiggins, Alta., N. Y., '02
Wiggs, Mrs. W. H., Ga., '00
Wilber, Austin E., Mich., '01
Wilber, Flora, Ill., '01
Wilber, Linus B., Minn., '02
Wilber, H Z., Kans., '02
Wilcox, Albert H., N. Y., '00
Wilcox, Jessie B., Wash., '99
Wiley, Wm. H., Ind., '96
Wilkins, A. H., Tex., '94
Wilkinson, E. W., Ohio, '00
Wilkinson, J. J., Ill., '96
Wilkinson, J. N., Kan., '84
Willard, F. E., Ill., '96
Willard, J. Monroe, Pa., '02
Williams Coll. Lib'y, Mass., '97
Williams, David, Fla., '97
Williams, Mrs. Delia, Ohio, '70
Williams, H. B., Ohio, '00
Williams, J. D., Ill., '96
Williams, L. W., R. I., '98
Williams, McD., Minn., '02
Williams, M., Ida, Cal., '99
Williams, Philo J., Kan., '86
Williams, Sherman, N. Y., '98
*Williams, Thyrza C., N. J., '97
Williams, Wm. H., Wis., '97
Williamson, A. W., Ill., '02
Williamson, J. E., Iowa, '95
Willis, H. B., N. J., '92
Willis, Mrs. H. B., N. J., '01
Willis, W. A., Iowa, '84
Willis, W. S., N. J., '01
Willson, P. J., Mich., '01
Wilmington Inst. Lib'y, Del., '00
Wilson, C. B., Mass., '96
Wilson, Clara A., Iowa, '02
Wilson, Eugene A., Mich., '99
Wilson, Mrs. G. T., Iowa, '02
Wilson, Harry G., Ill., '95
Wilson, H. B., Ind., '00
Wilson, H. G., Ariz., '01
Wilson, H. L., Wis., '02
Wilson, J. Alfred, N. J., '99
Wilson, J. Ormond, D. C., '80
Wilson, J. W., Kan., '01
Wilson, Mrs. L. L. W., Pa., '99
Wilson, M. C., Ala., '00
Wilson, Olive B., Ill., '02
Wilson, V. L., Iowa, '97
Wilson, W. B., Utah, '01
Wilson, Wm. E., Wash., '90
Windate, Ida M., Ill., '96
Wingebach, Jos. F., N. Y., '02
Winne, Jas., Conn., '92
Winship, Albert E., Mass., '92
Winston, Geo. T., N. C., '96
Winters, T. H., Ohio, '97
Winthrop N. Coll., S. C., '01
Wirt, Wm. A., Ind., '00
Wise, Henry A., Md., '85
Witherspoon, Jas. H., Ark., '99
Witmer, Chas. K., Pa., '94
Witmer, Lightner, Pa., '98
Witter, Chas. E., Mo., '02
Witter, F. M., Iowa, '97
Wolfe, H. K., Neb., '96
Wolfe, L. E., Tex., '90
Woman's Coll., Md., '99
Wood, Chas. H., Ind., '01
Wood, Court F., D. C., '97
Wood, Emory M., Mich., '89
Wood, Jas. A., N. Mex., '97
Wood, John A., Ind., '98
Wood, O. M., P. R., '93
Wood, Stella L., Minn., '02
Woodhull, J. F., N. Y., '99
Woodley, O. I., N. J., '96
Woodmansee, M. A., Ohio, '98
Woods, Francis M., Ill., '96
Woodward, C. M., Mo., '87
Woodward, Eliz. J., Mass., '99
Woodward, F. C., Va., '99
Woodward, J. C., Ga., '97
Woodward, S. M., Ariz., '02
Woody, H. G., Ind., '93
Wooley, L. C., N. J., '93
Woolsey, P. S., Cal., '01
Work, H. B., W. Va., '00
Worley, G. W., Ind., '01
Wooster, Lizzie E., Kan., '00
Wright, A. M., N. Y., '93
Wright, Anna J., Ohio, '94
Wright, Edmund W., Me., '89
Wright, G. H. B., Cal., '01
Wright, G. S., Mich., '01
Wright, J. L., Tenn., '02
Wright, John A., Ohio, '01
Wright, L. L., Mich., '96
Wright, Mary A., Minn., '02
Wright, O. A., Ohio, '98
Wright, R. R., Ga., '00
Wright, Wm. R., Mich., '92
Wylie, Mrs. M. J. B., N. Y., '91
Wyly, G. A., Ohio, '01
Yale Univ. Lib'y, Conn., '01
*Yates, A. A., N. Y., '98
Yates, Lydia A., N. C., '98
Yerkes, S. W., Wash., '02
Yocum, A. Duncan, Pa., '02
Yoder, A. H., Wash., '96
York, Lewis E., Ohio, '01
Youker, H. S., Wis., '02
Young, C. M., S. Dak., '02
Young, C. N., Wash., '01
Young, Mrs. Ella F., Ill., '00
Young, J. B., Iowa, '96
Young, J. S., Minn., '95
Young, Nathan B., Fla., '96
Young, Robert G., Mont., '89
Zeller, J. W., Ohio, '01
Ziek, Mary, Iowa, '98
Zillafro, Margaret C., Pa., '96
Zimmerman, C. F. A., Wis., '95
Zirkle, H. W., Colo., '98
Zueblin, Chas., Ill., '01

INVENTORY AND PRICE LIST OF PUBLICATIONS OF THE NATIONAL EDUCATIONAL ASSOCIATION IN THE DEPOSITORY AT WASHINGTON, D. C., JULY 1, 1902

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IRWIN SHEPARD, *Secretary*,
Winona, Minn.

CLASSIFIED MEMBERSHIP BY STATES
IN THE
NATIONAL EDUCATIONAL ASSOCIATION
FOR THE YEAR 1902—(MINNEAPOLIS MEETING)

State or Territory	Active Membership					Associate Membership	Total Membership
	Life Directors	Life Members	Former Active Members	New Active Members	Total Active Membership		
Total.	35	116	2,502	562	3,215	7,135	10,350
North Atlantic Division	9	21	651	91	772	776	1,548
South Atlantic Division	4	8	188	22	222	141	363
South Central Division	3	2	136	32	173	128	301
North Central Division	16	76	1,202	155	1,649	5,886	7,535
Western Division	3	9	29	50	331	150	481
Colonies	....	....	14	3	17	....	17
Foreign (including Corresponding, 28)	....		42	9	51	54	105
North Atlantic Division—							
Maine	1	1	9	1	12	20	32
New Hampshire	....	1	4	5	10	16	26
Vermont	....	....	11	2	13	12	25
Massachusetts	1	2	131	21	155	126	281
Rhode Island	1	....	19	1	21	7	28
Connecticut	....	....	26	7	33	27	68
New York	4	9	264	35	312	283	595
New Jersey	1	2	70	8	81	35	116
Pennsylvania	1	6	117	11	135	250	385
South Atlantic Division—							
Delaware	....	....	6	....	6	7	13
Maryland	1	....	30	3	34	28	62
District of Columbia	2	3	39	2	46	51	97
Virginia	....	....	16	3	19	8	27
West Virginia	1	1	15	2	19	9	28
North Carolina	....	2	17	2	21	12	33
South Carolina	....	1	19	1	21	4	25
Georgia	....	1	30	4	35	8	43
Florida	....	....	16	5	21	14	35
South Central Division—							
Kentucky	1	....	27	4	32	41	73
Tennessee	1	1	17	8	27	10	37
Alabama	....	....	23	9	32	20	52
Mississippi	....	....	12	1	13	2	15
Louisiana	....	....	13	4	17	24	41
Texas	....	....	17	1	18	8	26
Arkansas	....	....	19	2	21	7	28
Oklahoma	....	1	7	1	9	8	17
Indian Territory	1	....	1	2	4	8	12
North Central Division—							
Ohio	2	12	222	23	260	226	486
Indiana	2	....	93	15	110	151	261
Illinois	5	6	317	82	410	837	1,247
Michigan	2	....	145	21	168	206	372
Wisconsin	....	31	82	25	138	539	677
Iowa	1	2	66	39	108	693	801
Minnesota	1	1	79	87	168	2,330	2,498
Missouri	2	2	76	13	93	94	187
North Dakota	....	....	17	15	32	276	308
South Dakota	....	....	29	20	49	341	390
Nebraska	....	1	38	11	50	146	196
Kansas	1	21	37	4	63	47	109
Western Division—							
Montana	....	....	23	6	29	31	60
Wyoming	....	....	7	1	8	2	10
Colorado	2	1	50	6	59	15	74
New Mexico	....	....	12	1	13	2	15
Arizona	....	....	13	4	17	5	22
Utah	....	....	11	7	18	7	25
Nevada	....	....	3	....	3	4	7
Idaho	....	....	8	....	8	5.	13
Washington	....	1	26	15	42	29	71
Oregon	1	....	7	2	10	17	27
California	....	7	109	8	124	33	157
Colonies—							
Alaska	....	....	1	....	1	....	1
Hawaii	....	....	3	2	5	....	5
Porto Rico	....	....	4	1	5	....	5
Philippine Islands	....	....	6	....	6	....	6
Foreign—	...	....	42	9	51	54	105

RECORD OF MEMBERSHIP BY STATES
IN THE
NATIONAL EDUCATIONAL ASSOCIATION
FOR EACH YEAR FROM 1884–1902, INCLUSIVE

Excepting for 1893, when no regular meeting was held. Heavier numbers show membership from the state in which the meeting for the year was held.

State or Terr.	Madison	Saratoga	Topeka	Chicago	San Francisco	Nashville	St. Paul	Toronto	Saratoga	Asbury Park	Denver	Buffalo	Milwaukee	Washington	Los Angeles	Charleston	Detroit	Minneapolis
	1884	1885	1886	1887	1888	1889	1890	1891	1892	1894	1895	1896	1897	1898	1899	1900	1901	1902
Total	2,729	625	1,197	9,115	7,216	1,984	5,474	4,778	3,360	5,915	11,297	9,072	7,111	10,533	13,656	4,641	10,182	10.350
N. Atl. Div	792	406	386	773	803	101	795	426	1,187	1,711	1,462	2,940	942	1,492	1,877	783	1,309	1,548
S. Atl. Div	77	16	31	44	113	128	95	151	309	271	289	237	172	1,146	361	1,181	473	363
S. Cen. Div	111	19	47	370	216	1,074	261	417	253	460	899	419	304	1,588	818	414	768	301
N. Cen. Div	1,712	176	708	7,671	1,074	642	4,156	2,933	1,456	3,357	7,211	5.083	5,315	5,882	5,074	1,903	6,981	7,535
West'n Div	26	7	25	102	4,974	38	122	196	104	73	1,403	377	366	412	5,487	354	686	481
Colonies..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	16	17
Foreign...	11	1	....	155	36	1	45	655	51	43	33	16	12	13	39	6	39	105
N. Atl. Div																		
Maine..	21	2	5	25	11	....	32	30	10	5	24	7	7	10	16	12	13	32
N. H...	64	6	10	23	11	....	32	9	5	7	27	8	6	6	14	5	7	26
Vt.....	43	8	3	41	4	....	40	4	20	4	13	14	15	11	11	8	21	25
Mass...	310	145	85	277	206	28	290	114	212	52	191	197	159	159	294	139	196	281
R. I....	50	13	13	29	30	4	31	42	23	12	55	35	23	36	50	18	23	28
Conn...	40	18	23	36	48	4	31	18	63	13	26	43	24	31	46	24	41	68
N. Y...	143	**159**	91	211	210	29	228	117	**611**	326	521	**2,132**	411	509	756	327	512	595
N. J....	40	27	35	23	41	13	12	16	65	**969**	168	179	110	172	154	93	173	116
Penna..	81	28	121	108	242	23	99	76	178	323	437	325	187	558	536	157	323	385
S. Atl. Div.																		
Del	1	....	4	....	3	1	2	5	6	8	17	11	8	9	9	4	7	13
Md.....	5	....	10	8	17	3	7	13	49	45	53	23	31	80	50	81	76	62
D. C. ..	30	1	7	12	32	13	21	10	35	24	47	29	57	**382**	99	57	137	97
Va.....	6	4	3	2	18	12	2	8	2	24	36	21	10	63	22	38	22	27
W. Va..	15	3	3	8	6	6	27	49	20	37	49	52	16	129	29	18	56	28
N. C....	3	2	....	2	8	12	2	13	17	15	5	14	4	76	27	72	29	33
S. C....	5	4	1	2	13	22	4	18	14	52	1	31	7	92	22	**691**	30	25
Ga.	11	1	2	10	16	43	23	31	163	64	62	43	30	261	87	145	77	43
Fla.....	1	1	1	....	....	16	7	4	3	2	19	13	9	54	16	71	39	35
S. Cen. Div																		
Ky.....	33	2	8	151	22	114	39	57	42	128	176	77	98	408	136	68	215	73
Tenn...	12	6	5	62	83	**607**	97	124	57	124	66	57	25	248	113	96	108	37
Ala	9	1	1	16	45	123	35	79	51	41	41	59	25	229	69	74	35	52
Miss....	7	1	2	7	10	87	44	42	36	20	49	25	19	100	65	27	20	15
La	3	7	8	11	7	19	13	25	21	35	108	25	42	146	60	26	46	41
Texas ..	22	1	15	55	29	89	20	53	9	82	294	99	41	257	221	55	148	26
Ark	22	....	8	67	12	29	12	34	33	25	84	63	41	132	96	46	116	28
Okla...	....	....	....	....	....	....	....	....	....	4	58	14	11	60	47	21	71	17
Ind. T..	3	1	....	1	8	6	1	3	4	1	23	....	2	7	11	1	9	12
N. Cen. Div																		
Ohio...	121	43	67	581	225	60	361	355	178	990	592	565	357	1,313	580	286	753	486
Ind.....	54	15	46	418	71	89	206	149	65	258	321	250	205	591	354	173	357	261
Ill......	354	33	164	**1,750**	222	204	625	666	214	871	1,495	1,174	785	1,340	1,216	557	1,142	1,247
Mich...	77	12	20	273	40	29	137	259	285	155	204	589	327	379	196	110	**2,183**	372
Wis....	**546**	18	18	486	57	28	443	222	72	143	188	413	**1,870**	361	287	187	293	677
Iowa...	304	18	87	1,146	96	67	572	278	110	164	1,086	578	543	383	593	82	444	801
Minn...	132	9	11	649	58	16	**933**	118	54	86	193	303	333	164	267	121	382	**2,498**
Mo.....	46	11	73	625	133	68	249	320	189	435	1,113	406	285	795	673	166	415	187
N. Dak.	23	1	5	149	8	7	99	32	16	8	28	34	53	26	38	16	98	308
S. Dak.							109	31	20	9	78	83	118	45	86	30	141	390
Neb....	39	5	27	634	40	10	147	220	126	127	742	363	251	103	331	86	325	196
Kan....	16	11	**190**	960	124	64	275	283	127	111	1,171	325	187	382	453	89	348	109
West'n Div																		
Mont...	3	1	1	9	4	5	37	24	9	3	15	43	78	20	70	24	88	60
Wyo....	1	2	2	8	8	....	5	13	4	2	48	7	10	8	13	7	15	10
Colo....	12	2	11	40	109	8	56	114	59	58	**1,136**	177	145	196	465	65	118	74
N. Mex.	...	....	....	2	26	2	1	7	5	....	26	16	21	27	90	18	31	15
Ariz....	....	....	....	1	45	1	1	....	2	2	11	6	6	21	158	19	34	22
Utah ...	....	1	3	4	127	....	....	10	8	4	89	37	22	25	106	8	32	25
Nev....	1	....	1	6	134	....	1	....	....	....	2	5	3	2	49	3	6	7
Idaho ..	....	....	1	....	12	....	....	....	1	1	3	10	6	3	32	11	19	13
Wash ..	1	....	1	3	27	1	6	18	1	2	6	16	8	12	56	20	81	71
Ore	3	1	1	11	204	8	7	5	5	....	14	9	7	10	79	13	45	27
Calif...	5	....	4	18	**4,278**	13	8	5	10	1	53	51	56	87	**4,357**	156	217	157
Colonies																		
Alaska..	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	1	1
Hawaii.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9	5	4	5
P. Rico.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	4	5	5
Phil. I'ls	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	6	6
Foreign...	11	1	....	155	36	1	45	**655**	51	43	33	16	13	13	39	6	39	105

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